VIRGINIA ◆ FOREST ◆ LEGACY ◆ PROGRAM

ASSESSMENT OF NEED

SEPTEMBER 2000

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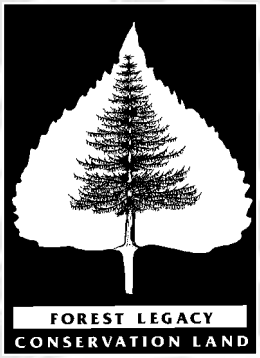

◆ VIRGINIA DEPARTMENT OF FORESTRY ◆

SEPTEMBER 2000

TABLE OF CONTENTS

STATEMENT OF PURPOSE 5
APPENDICES LISTING 7
ACKNOWLEDGMENTS 9
INTRODUCTION 13
THE "WORKING FOREST" CONCEPT 13
OVERVIEW OF VIRGINIA'S FOREST RESOURCES 14
FOREST COMPOSITION AND DISTRIBUTION 14
FISH AND WILDLIFE HABITAT INCLUDING THREATENED AND ENDANGERED SPECIES 14
MINERAL RESOURCES POTENTIAL AND OUTSTANDING GEOLOGICAL FEATURES 17
PUBLIC RECREATION OPPORTUNITIES 18
GENERAL SOILS AND PRODUCTIVITY IN VIRGINIA 19
TIMBER MANAGEMENT OPPORTUNITIES 20
WATERSHED VALUES 22
VIRGINIA'S FORESTS: CULTURAL HISTORY WITH HISTORICAL USES AND PROJECTED USES 23
GEOLOGIC HISTORY 23
NATURAL HISTORY 23
VIRGINIA'S FORESTS 24
COLONIAL FARMING AND FOREST DEPLETION 25
EFFECTS OF CUTTING FORESTED LAND 26
IMPACTS OF TECHNOLOGY ON VIRGINIA'S FORESTS IN THE 19TH AND 20TH CENTURIES 27
TRENDS IN FORESTRY 27
CURRENT AND FUTURE OWNERSHIP PATTERNS 28
DEMOGRAPHICS PATTERNS AS THEY RELATE TO FOREST FRAGMENTATION 28
LEGISLATION AFFECTING VIRGINIA'S FORESTS AND THE CREATION OF GOVERNMENT LANDS 29
FEDERAL LAND OWNERSHIP IN VIRGINIA 30
VIRGINIA'S URBAN FOREST 31
EXISTING MEASURES TO CONSERVE FOREST LAND 31
VIRGINIA OUTDOORS FOUNDATION 32
VIRGINIA LAND CONSERVATION FOUNDATION 32
THE NATURE CONSERVANCY 32
VIRGINIA'S LAND TRUSTS 32
THE PUBLIC PARTICIPATION PROCESS 32
VIRGINIA DESIGNATED FOREST LEGACY AREAS WITH DESCRIPTIONS 35
DETAILED FOREST LEGACY AREA DESCRIPTION 37
APPENDICES 41
BIBLIOGRAPHY 96

STATEMENT OF PURPOSE

Of Virginia's 25.4 million acres, 15.4 million acres of forest are classified as timberland with an additional 579,000 acres of parks, wilderness, and scenic and historic resources. These categories combine for an estimated 16 million acres available to the citizens of Virginia and the United States. As we enjoy this abundance of forestland, we also must realize that over 93,000 acres are lost annually from all land types to non-renewable conversion such as urban and suburban development (NRI data).

The United States Forest Service (USFS) Forest Legacy Program assists state governments to identify and protect important private forest tracts. Privately owned forests offer valuable benefits including water quality, recreation opportunities, scenic and historic values, and wildlife habitat. The primary protection tool, the conservation easement, is an effective means of influencing the disposition of important forestland while continuing private ownership.

In October, 1999, Governor James S. Gilmore III designated the Virginia Department of Forestry as the lead state agency to coordinate the Forest Legacy Program and prepare this Assessment of Need document. The following information summarizes Virginia's forest resources, history, ownership patterns, and cultural impacts. The Department has held seven public meetings to receive input on this program and to determine potential Forest Legacy areas. We have then designated five Forest Legacy areas for your consideration.

The core premise of Virginia's Assessment of Need is the promotion and integration of the "Working Forestlands" concept into general forestland conservation efforts. We believe that diverse, well-managed forests are the healthiest, and consequently, provide the most public benefits when protected from the economic pressure for development.

We, at the Department of Forestry, trust this document fulfills the requirements of the Assessment of Need protocol as defined in the Forest Legacy Implementation Guidelines. We appreciate the support of the United States Forest Service as we progress in the conservation of Virginia's forest landbase.

APPENDICES

Appendix A: Virginia Forest Legacy Landowner Application Package

Appendix B: Authorization Documents

Appendix C: Public Involvement Process

Written Comments on Proposed Goal

- Regional Scoring
- Area Recommendation
- Land Conversion Pressures
- Additional Written Comments & Suggestions
- Public Meeting Oral Comments

Appendix D: Literature Cited

ACKNOWLEDGMENTS

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Anitra Webster, Landowner

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2000-2001 VIRGINIA
FOREST STEWARDSHIP COORDINATING COMMITTEE

The Virginia Forest Stewardship Coordinating Committee will establish and coordinate the Virginia Forest Stewardship Program administered by the Virginia Department of Forestry. This committee will advise the State Forester on policies and procedures to provide for implementation of the State Forest Stewardship Plan. The Committee will meet at least annually (March - May) to approve the work plan and budget based on allocation of grant funds from USDA Forest Service.

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INTRODUCTION

THE "WORKING FOREST" CONCEPT

Virginia's forests are extremely diverse and provide a multitude of both environmental and social benefits. Of the Commonwealth's 16 million forested acres, approximately 77% are in private ownership. The importance of forests in cleansing air, purifying water, providing products and fostering recreation opportunities is unparalleled. For the purposes of the Forest Legacy Program, the term "working forests" encompasses all those benefits healthy forests provide.

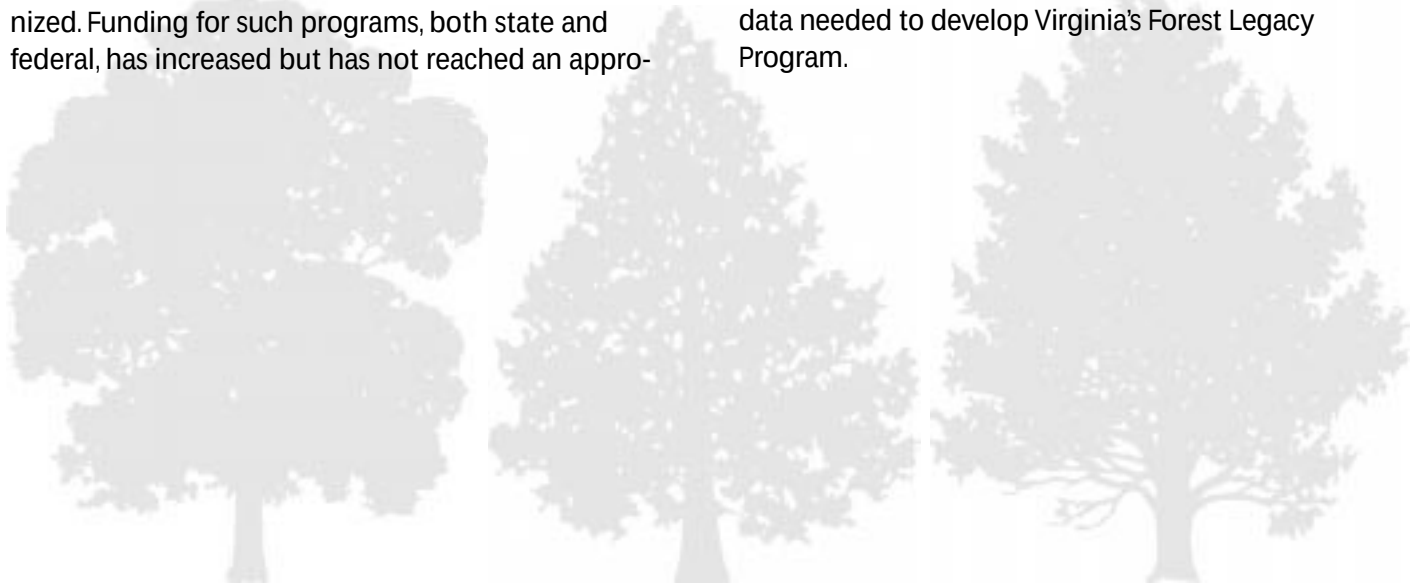
Virginia's forests are also the backbone of a strong economy with the forest products industry providing a vital income source for both rural areas and smaller cities. In 1996, the harvesting, processing, and marketing of wood products added $9.8 billion annually to the economy and accounts for over 228,000 jobs. In addition, forests provide added economic value through non-timber products, tourism, and outdoor recreation.

These important natural resource values and benefits, however, are in direct conflict with the growing pressure from expanding population. In Virginia, the national trend of people moving and commuting from cities to rural settings is readily apparent. This trend is not expected to reverse itself, hence, conserving critical forestland becomes imperative.

The acknowledgment that landbase conservation is necessary in the new millennium has been recognized. Funding for such programs, both state and federal, has increased but has not reached an appropriate level to ensure adequate protection of valuable forest tracts. Most state programs have an emphasis on farmland conservation; hence, funding for forestland protection is diminished due to sheer volume of need.

The United States Congress established the Forest Legacy Program (FLP) as part of the Food, Agriculture, Conservation, and Trade Act of 1990 (P.L. 101-624: 104 stat. 3359) to promote long-term integrity of forestlands. The program's purpose is to identify and protect environmentally important, privately-owned forest tracts threatened by conversion to non-forest uses through purchase of conservation easements and fee-simple acquisitions. Through the Federal Agriculture Improvement and Reform Act of 1996, (P.L. 104-127: stat.888), the Secretary of Agriculture is authorized, at the state's request, to award grants for the state to carry out the FLP in the state, including the acquisition of land and interests in land.

Eligibility for the FLP will be determined by a multi-step inclusive process involving the forestry community, state and federal agencies, and the general public. The primary objective will be the protection of forest tracts threatened by non-forest uses and focusing on important scenic, aesthetic, wildlife-rich, and recreation-rich areas in a context of the "working forest" land concept. The following resource analyses will form the backdrop and core data needed to develop Virginia's Forest Legacy Program.



OVERVIEW OF VIRGINIA'S FOREST RESOURCES

FOREST COMPOSITION AND DISTRIBUTION

Virginia possesses 25.4 million acres with 15.4 million acres classified as commercial forestland. An additional 579,000 acres of parks, wilderness, scenic, and historic areas provide recreational activities to Virginians and visitors alike. Non-industrial private landowners own 77% of the commercial forestland (Figure 1), forest industry owns 10 % and remaining 13% is government-owned (Foreman et al, 1995).

Figure 1.

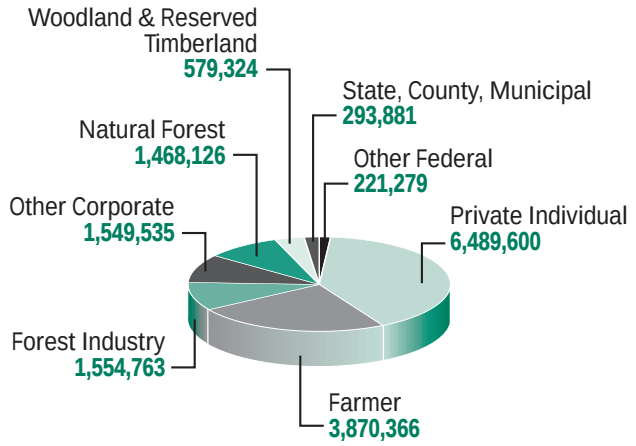


Table 1 shows Virginia's five major timber types. Hardwood types equal 78% of the total acreage and pine types equal the remaining 22%. Pine plantations comprise 44% of the pine type with Loblolly Pine being the principal planted tree. Yellow poplar is the most abundant of the hardwood species (Foreman et al, 1995).

Table 1. Area of Timberland by Forest Type – 1992

	Acres
Pine Plantation	1,472,324
Natural Pine	1,880,427
Oak-Pine	1,941,207
Upland Hardwood	9,518,571
Lowland Hardwood	635,021
TOTAL	15,447,550

Source: USDA Forest Service, *Forest Statistics for Virginia*, 1992, Resource Bulletin, SE-131

FISH AND WILDLIFE HABITAT INCLUDING THREATENED AND ENDANGERED SPECIES

The diversity of living forms in Virginia is unsurpassed in any temperate area of comparable size. This diversity is the result of a complex history of evolution and migration among plant and animal species which has taken place over several hundred million years on a varied land surface and under changing climatic conditions (Woodward and Hoffman, 1991). Hence, a wide range of habitats is found within Virginia's borders.

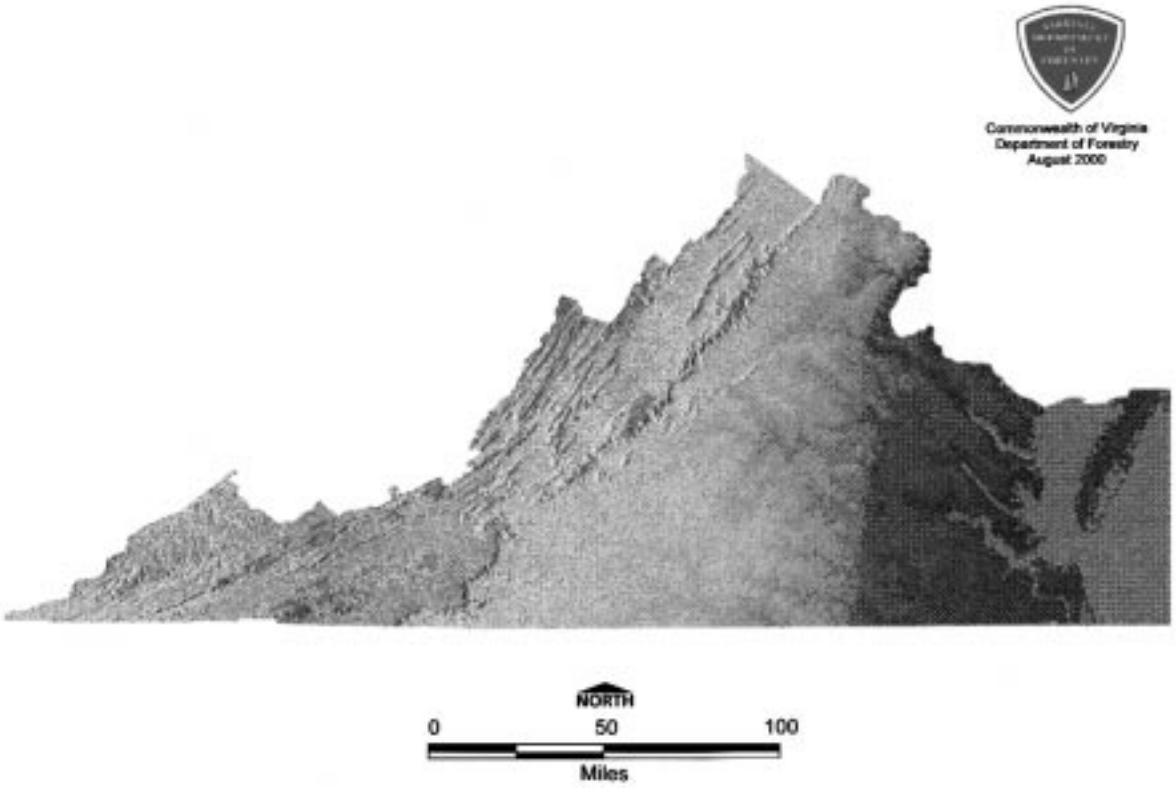
Virginia intersects five physiographic provinces, more than any other eastern state. The five provinces provide a multitude of different microenvironments for life to exploit and are a major factor influencing the high diversity of lifeforms found in the state (Woodward and Hoffman, 1991). These provinces are the Coastal Plain, Piedmont Plateau, Blue Ridge, Ridge and Valley, and Appalachian Plateaus. Figure 2 depicts Virginia's topographic relief.

As in the case for any significantly large region, in Virginia, the flora contains aggregations of species, termed elements, which have their centers of distribution elsewhere. Few species elements are uniquely Virginian (Porter and Wieboldt, 1991). Many species either have their northern or southern most range limitations in Virginia.

Virginia has 94 rare (endangered, threatened, and special concern) Coastal Plain and 19 rare Piedmont species reaching their northern limits of distribution in Virginia in contrast to 19 rare Coastal Plain and nine rare Piedmont species reaching southern limits in the state.

At the same time, a large number of northern species extend southward into, through, or even skip Virginia to the higher southern Appalachian Mountains, a much larger number of southeastern Coastal Plain species do not extend as far north as Virginia. The Chesapeake Bay and its tributaries present a major physical barrier to Coastal Plain species migration. The Piedmont flora is essentially southern in its affinities. Most of its habitats are continuous southward for a great distance (Porter and Wieboldt, 1991).

Figure 2. Virginia Relief Map



In the mountain provinces, the habitats are aligned with the northeast United States. Two exceptions are noted as one proceeds to southwest Virginia. These are the Mount Rogers/Whitetop area and the Ridge and Valley section in southwestern Virginia. The two mountains contain many rare species due to the elevation differences between themselves and neighboring areas.

Augusta County has 19 threatened and endangered plants, the most of any location in Virginia. This is due to the diversity of habitats including sinkhole ponds, fens, bogs, and shale barrens.

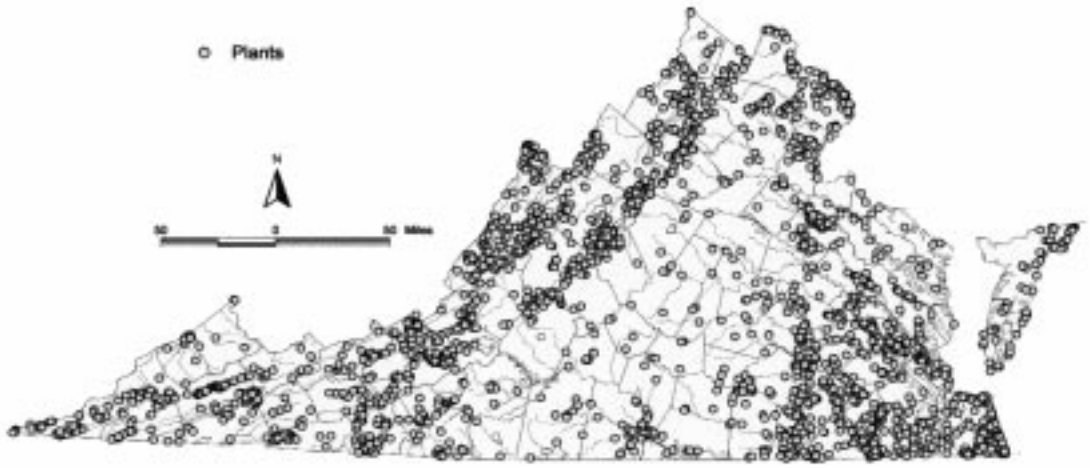
Giles, Montgomery, and Grayson counties have eight species each. Other mountain counties such as Madison and Page have seven and five species respectively (Porter and Wieboldt, 1991). This diversity occurring in these mountain counties is due to the combination of elevation and location along the mountain range. Heading east, Caroline County has six species that were once more widespread (Harvill, 1970). In Isle of Wight County and the city of Suffolk, the six and five rare species, respectively, occur on sandhills and pine barrens. This is indicative of the tight relationship between rare species and habitat type (Porter and Wieboldt, 1991).

As mentioned above, the diversity of habitats is primarily responsible for the large number of rare species in Virginia. Human intervention and major disruption of habitat types has greatly influenced diversity. These disruptions are urbanization, wetland loss, conversion of naturally diverse forests to pine plantations, deforestation, and fire suppression (Porter and Wieboldt, 1991).

Figures 3, 4 and 5 show threatened and endangered plants, animals and natural communities in Virginia.

Department of Conservation & Recreation, Division of Natural Heritage

Statewide Occurrences of Monitored Plant Species



The data depicted here are not based on a comprehensive inventory of VA. The lack of data for any geographic area cannot be construed to mean that no significant features are present. VANHP is not responsible for any inaccuracies in the data and does not necessarily endorse any interpretations or products derived from the data. The data were compiled from a variety of sources including field surveys, universities, systematics collections, government agencies, and individual biologists. Additions and changes to these data are constant. This map only depicts the state of knowledge at the listed date.

DCR

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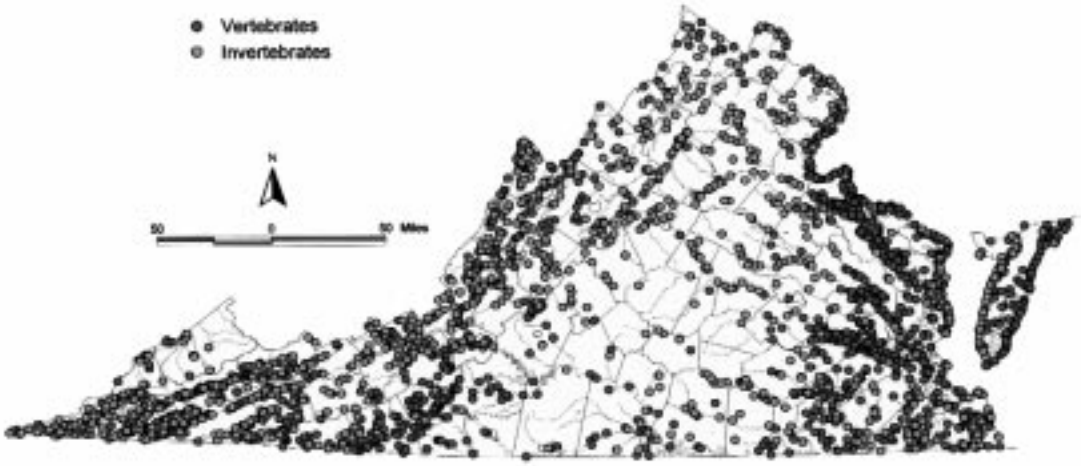
Department of Conservation & Recreation, Division of Natural Heritage

Statewide Occurrences of Monitored Animal Species



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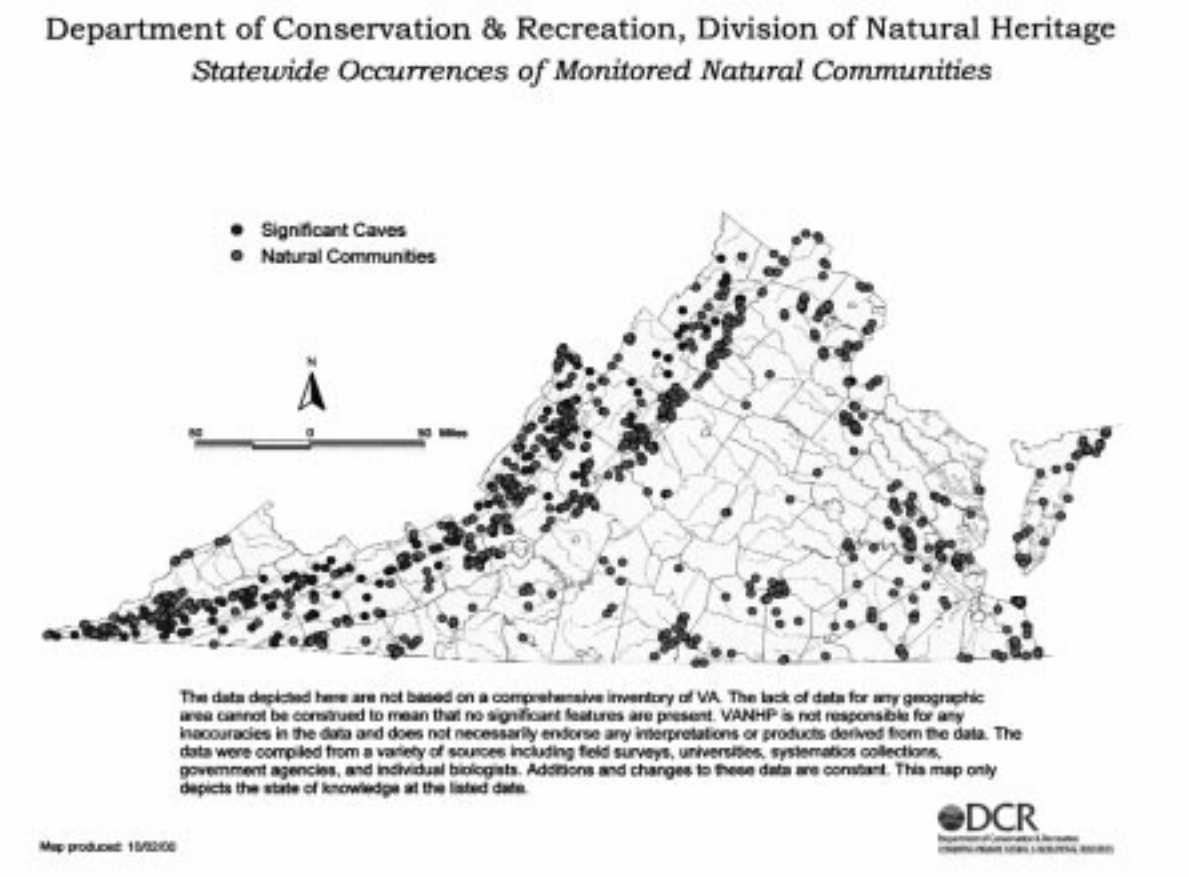


A long history of intensive agriculture in the Piedmont and Ridge and Valley sections has greatly modified the vegetation of these provinces. Wetland losses have been greatest in the Coastal Plain but is also a serious situation in the uplands. These human activities continue to reduce the available habitat for rare species.

MINERAL RESOURCES POTENTIAL AND OUTSTANDING GEOLOGICAL FEATURES

The eastern edge of the North American continent was constructed during the Paleozoic era (about 570 to 250 million years ago) (Woodward and Hoffman, 1991). The land surface of the North America has been divided into more than 20 physiographic provinces (Fenneman, 1938). As mentioned above, Virginia possesses five provinces, more than any other eastern state. The following is a short summary of each province:

COASTAL PLAIN: This is a surface area of low relief which slopes gently to sea level. Minimum relief occurs on the Eastern Shore. This province is dissected into four peninsulas; the Northern Neck, Middle, Peninsula, and the Eastern Shore. It is composed of consolidated sediments eroded from the Appalachian Highlands and deposited along the margin of the continent. South of the James River is divided into the Inner (Upper) and Outer (Lower) Coastal Plain. The surface of the Outer Coastal Plain is composed of unconsolidated sands and gravels. The shallow waters receive ample nutrients and are home to important wetland communities.

PIEDMONT: This is a gently rolling upland bounded on the east by the Coastal Plain province and west by the Blue Ridge. Its elevation ranges from 200 to 1000 feet. Distinct peaks called monadnocks rise above the surface of the Piedmont province. Monadnocks also harbor diverse species types due to elevational differences.

BLUE RIDGE: This province is a portion of the underlying rock that was uplifted over younger material during the formation of the Appalachian chain. This area is narrow with areas as little as 10

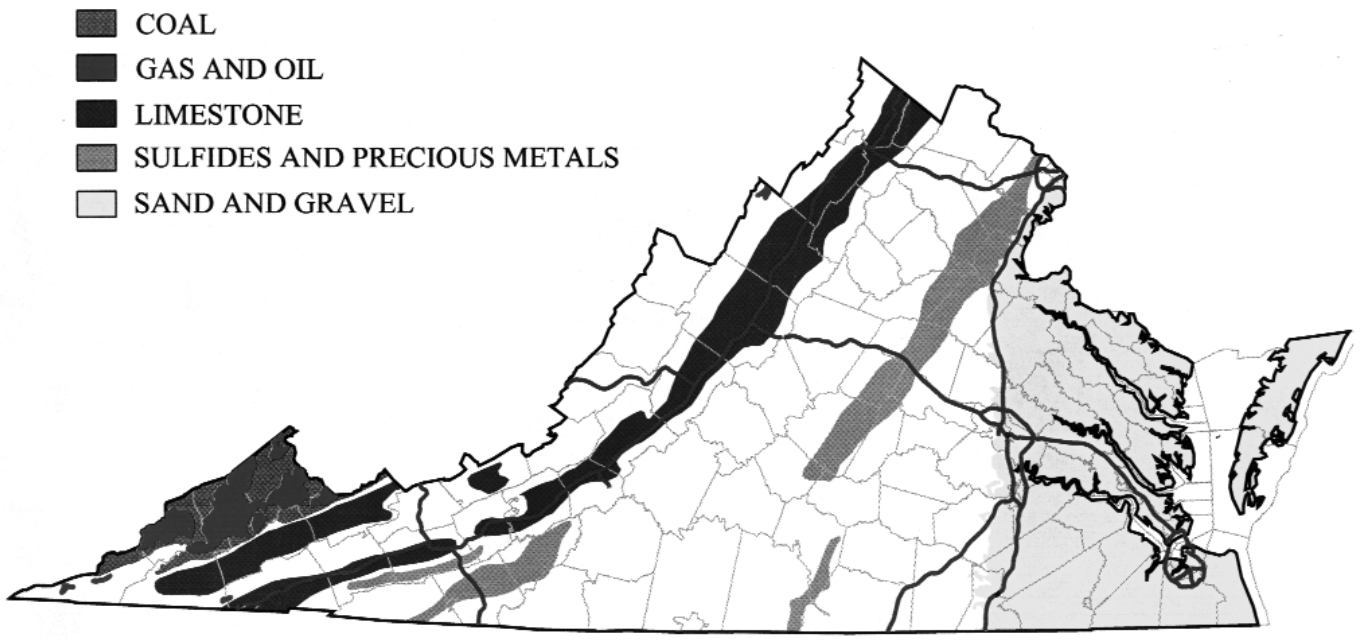


Figure 6. Selected Mineral Resources in Virginia

miles across. The surface elevation of the Blue Ridge ranges from 1800 in the north to over 3000 feet in the southern part. Mount Rogers and Whitetop are the two highest points in the state and contained within this province. Additionally, these two peaks possess diverse ecosystem types not found anywhere else in Virginia.

RIDGE AND VALLEY: Most of western Virginia lies in this province. Parallel ridges and valleys characterize this area. This area was thick deposits of sedimentary rock folded and faulted when the Appalachian system was formed. Karst and sinkhole topography are common in this province. The Shenandoah River is a prominent feature of this area and flows north to the Potomac River. The James, Roanoke, New and Holston Rivers also have their headwaters in this province. The Clinch and Holston Rivers are home to several species of freshwater mussel found nowhere else. Elevations run from 900 to 3000 feet.

APPALACHIAN PLATEAU: This province is located in far southwest Virginia and is greatly dissected and mountainous. Level surfaces are rare with most peaks around 2300 feet. Coal mining is dominant activity in this province.

Figure 6 depicts selected mineral resources in Virginia.

PUBLIC RECREATION OPPORTUNITIES

Virginia is a popular recreation location for its unique blend of recreational and historic sites, natural areas, beaches, and mountains. The 1992 *Virginia Outdoors Survey* indicated that 24% of those surveyed visited natural areas while visiting gardens was the 16th most popular activity. Many of these opportunities result from resources available to the public through the efforts of federal, state, and local agencies.

People are concerned with their "quality of life". "Quality of life" manifests itself in a variety of ways including meaningful work, individual wellness, utilizing time appropriately, and a desire for a sense of community. Open space and recreational offerings can contribute to the "quality of life" by providing opportunities for people to escape from the daily grind,

experience nature, learn and improve wellness through physical activities. Leisure activities such as ecotourism and environmental education are anticipated to be increasingly popular (Virginia Outdoors Plan, 1996).

According to the 1992 survey, 77% of the respondents believed that the public sector has a responsibility to provide public recreation opportunities. Furthermore, the respondents stated that conservation of threatened and endangered species is important.

Of Virginia's 25,496,000 acres of land, approximately 12% is public land. The federal government owns 2,645,700 acres or 9% and Virginia owns 717,000 or just under 3%. A wide variety of recreational opportunities exist. The following is a list of the types of recreational activities available in Virginia:

- 18 National Parks totaling 300,000 acres including Shenandoah National Park
- 1.7 million acres of National Forest constituting 50% of the public outdoor recreation land in Virginia
- 15 wildlife refuges comprising more than 150,000 acres
- 31 state parks, 6 historic sites, 3 State Park Natural Areas, 8 Natural Area Preserves
- 18 scenic rivers
- Tier I, II, and III recreational waters
- 565 public access fee ramps and 408 private marinas
- 1460 acres of beaches
- 4 types of cultural landscapes
- Extensive greenways/trail system and "rails to trails" network
- 2000 miles of preferred backpacking including significant sections of the Appalachian Trail
- 1100 miles of a Virginia Byway system for driving vehicles including Skyline Drive along the Blue Ridge Mountain
- 426,000 acres of water supply reservoirs and military land

Despite the impressive list of recreation areas, Virginia is the 12th fastest growing state in the United States but nearly last in expenditures for new public recreation areas.

GENERAL SOILS AND PRODUCTIVITY IN VIRGINIA

Soil productivity is defined as the ability of a soil to produce abundant crops, including balanced and high fertility, adequate light, air, moisture, and temperature with freedom from insects, diseases, and weeds (Donahue, et al, 1977). As stated earlier, Virginia contains five physiographic regions with wide soil diversity.

Virginia's most productive soils occur in the Ridge and Valley section and some areas of the Piedmont and Coastal Plain. The poorer soils are located, as expected, on dry ridgetops in the mountains and saturated soils in the Coastal Plain.

The soils of Virginia differ chiefly due to differences in the materials from which they are formed, the environmental conditions that they developed under and the length of time these environmental factors have acted up on the parent materials. These differences in soils help determine the productivity and type of vegetation occurring in an area.

The Appalachian area is located in the extreme western portion of the state and extends in a northeasterly direction across the state. The dominant formations are mainly metamorphosed sedimentary rocks consisting of sandstone, shale and limestone. The western most part consists mainly of soils occurring on steeper topography. The areas of the mountains and uplands along the entire area are made up of sandstone or interbedded sandstone and shale, with many of the foothills being developed from acid shale. The soils in the area are steep and shallow to bedrock. These steeper areas typically have moderate productivity. Those areas between the ridges are narrow valleys which are less extensive

but much more productive and have considerable agricultural importance. The limestone valley areas have soils developed from rocks containing varying amounts of calcareous material. These soils usually are heavier in texture and inherently fertile and are high in productivity, and make significant contributions to species richness.

The Blue Ridge Mountain area runs through Virginia in a northeasterly to southwesterly direction. The northwest slopes are made up of highly metamorphosed sedimentary rocks consisting of sandstone, quartzite, and shale. The soils are shallow, generally very stony, and low in productivity. The southeastern slopes, eastern foot slopes, and the smooth mountain tops have soils that are developed mostly from igneous and metamorphic rocks – granite, gneiss, schist, mica schist, and greenstone. Fertility and production is low in most areas. Soils on the plateau and smooth mountaintops are responsive to good soil management practices and have moderate productivity.

The Piedmont plateau makes up the largest total area and is located in the central part of the state. It is a region comprised of granite, diorite, diabase, greenstone, gneiss, schists, phyllite, slate and others. Most of the Piedmont soils have developed under forest cover. In this region of moderate to heavy rainfall and relatively warm temperature, active leaching of soil plant nutrients including calcium causes this area to have moderate productivity. The soils in the northern Piedmont tend to contain more organic accumulations, have less leaching and are more fertile.

The Coastal Plain deposits are the youngest geological formation in Virginia and are comprised chiefly of heavy clays, sandy clays, and sands. In places rich marl deposits have formed, as have areas with accumulation of high levels of organic material, and peat in some of the lower lying areas. In general, soils in the Coastal Plain are more sandy throughout their profile than soils found in other regions of the state. Much of the area is moderately productive, however high productivity occurs further to the south and east. Those areas that are extremely wet and have low productivity (Criz, personal communication).

TIMBER MANAGEMENT OPPORTUNITIES

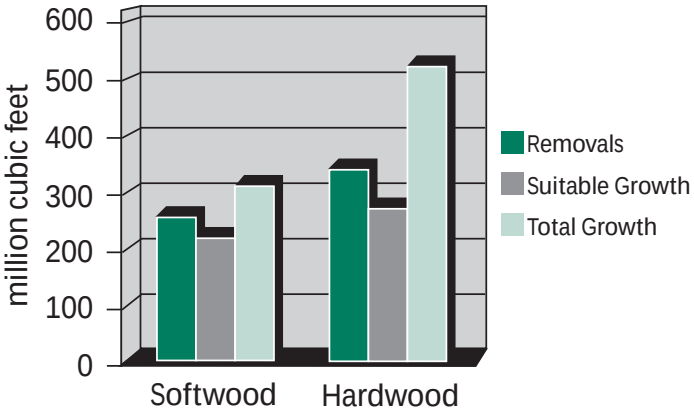
The economic importance of Virginia's timber industry and the increasing demand for forest products is a significant cog in the "working forests" concept. At 6.5 million, the state's population is placing greater demands on our remaining forestlands and the resources they provide. Virginia's forest industry provides a vital source of income and jobs for many rural areas and smaller cities. The harvesting, processing and marketing of wood products adds $9.8 billion annually to Virginia's economy and accounts for over 228,370 jobs. When viewed in its entirety, Virginia's forest resources contribute $11.5 billion each year to the economy of the Commonwealth and is ranked 2nd behind poultry and eggs. (Foreman, et al, 1996).

The most positive change in Virginia's forestland over the last 50 years has been in the standing volume of timber. Since 1940, total volume has increased 81% from 14.7 billion to 26.6 billion cubic feet. This has occurred while the forest was providing 1 billion board feet of sawtimber and 2 million cords of pulpwood for manufacturing. Virginia's forest industry ranks second only to poultry and eggs as the leading crop (Foreman, et al, 1996).

Despite the significant increases in standing volume, Virginia's forest resources and forestland base are in jeopardy. From 1976 to 1986, the reforestation trend reversed with a net loss of 551,000 acres of forestland to urban and agricultural uses. Accelerated private land planting was able to stop the downward trend between 1986 to 1992. However, since 1992, the amount of reforestation has declined once again. Furthermore, forestland continues to fragment as urban and suburban development reaches out into the countryside.

In other areas of the South, removals have begun to exceed growth. As a consequence, several new wood processing mills have located in Virginia bringing both economic prosperity but an increasing demand on the resource. Estimates of timber volumes, growth, and removals indicate there exists increasing areas of "unsuitable rural forestland" such as those with steep slopes, small acreage, narrow strips and

Figure 7. Annual removals and growth, softwood and hardwood



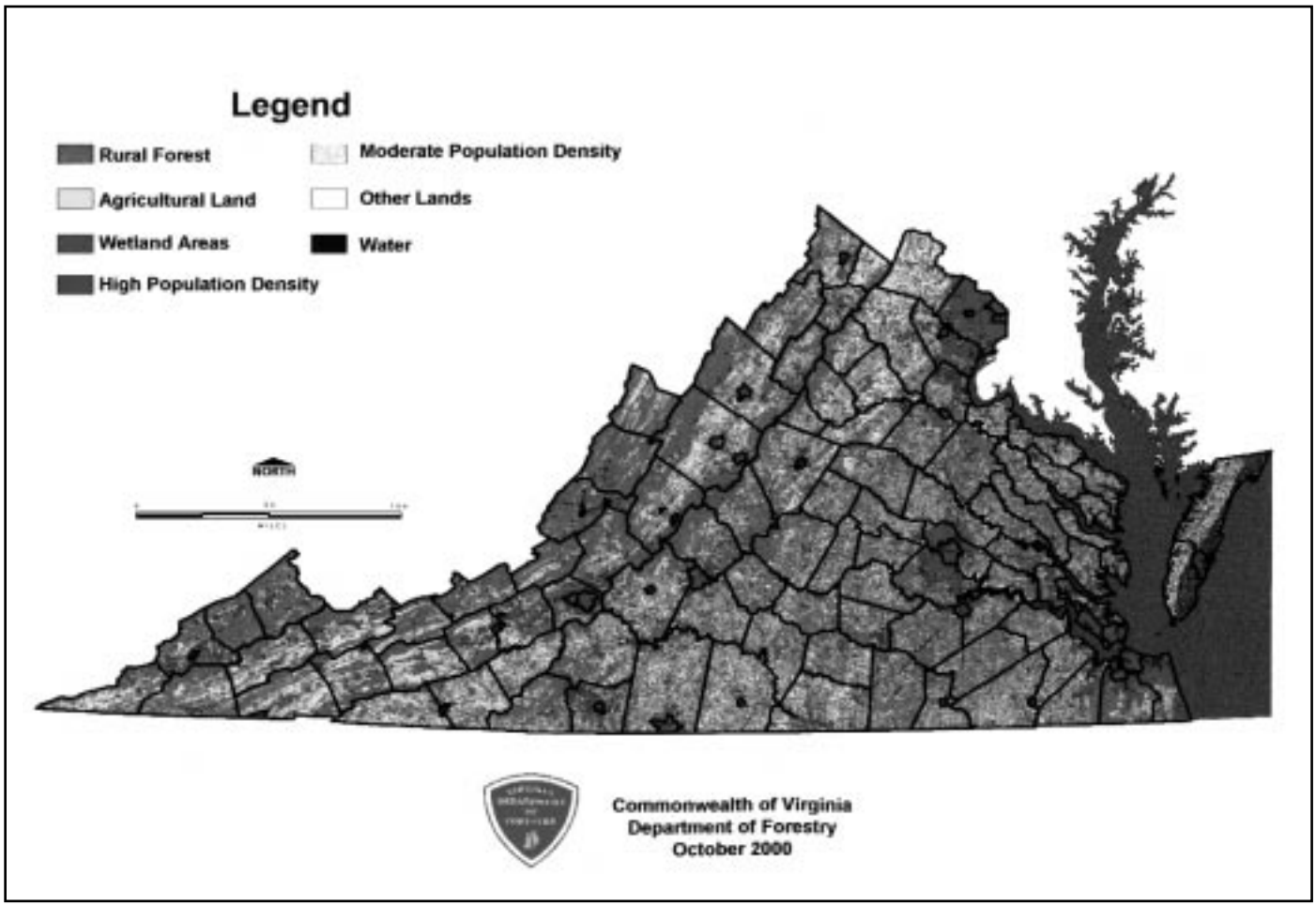
stringers, or more importantly, population increases which discount the available acreage and volume. This recent *Resource Assessment* shows that only 8.5 million acres, or 55%, is likely to remain available for timber production (Scrivani and Liu, 1997).

Figure 7 illustrates the relationship between annual removals and growth for both softwood and hardwood species from the *Virginia Resource Assessment Project*.

Figure 8 shows the statewide map for the *Virginia Resource Assessment Project*. This map depicts a colorized map of Virginia with areas of high and moderate population areas and land use. As one can see, the areas of higher population are growing together making resource availability a significant issue for the Year 2000 and beyond. The impacts of forest fragmentation are widespread in Virginia and will affect timber availability in the future. While a moratorium on development is not possible, there may be mechanisms to influence landowners to hold on forest and maintain a viable land base. The following are some mechanisms that may influence landowners to hold on to forestland (Foreman, 1999):

- push the concept of local landowner associations to coordinate education and training, management across property boundaries, and to achieve policy issue focus;

Figure 8. Forest Resource Assessment



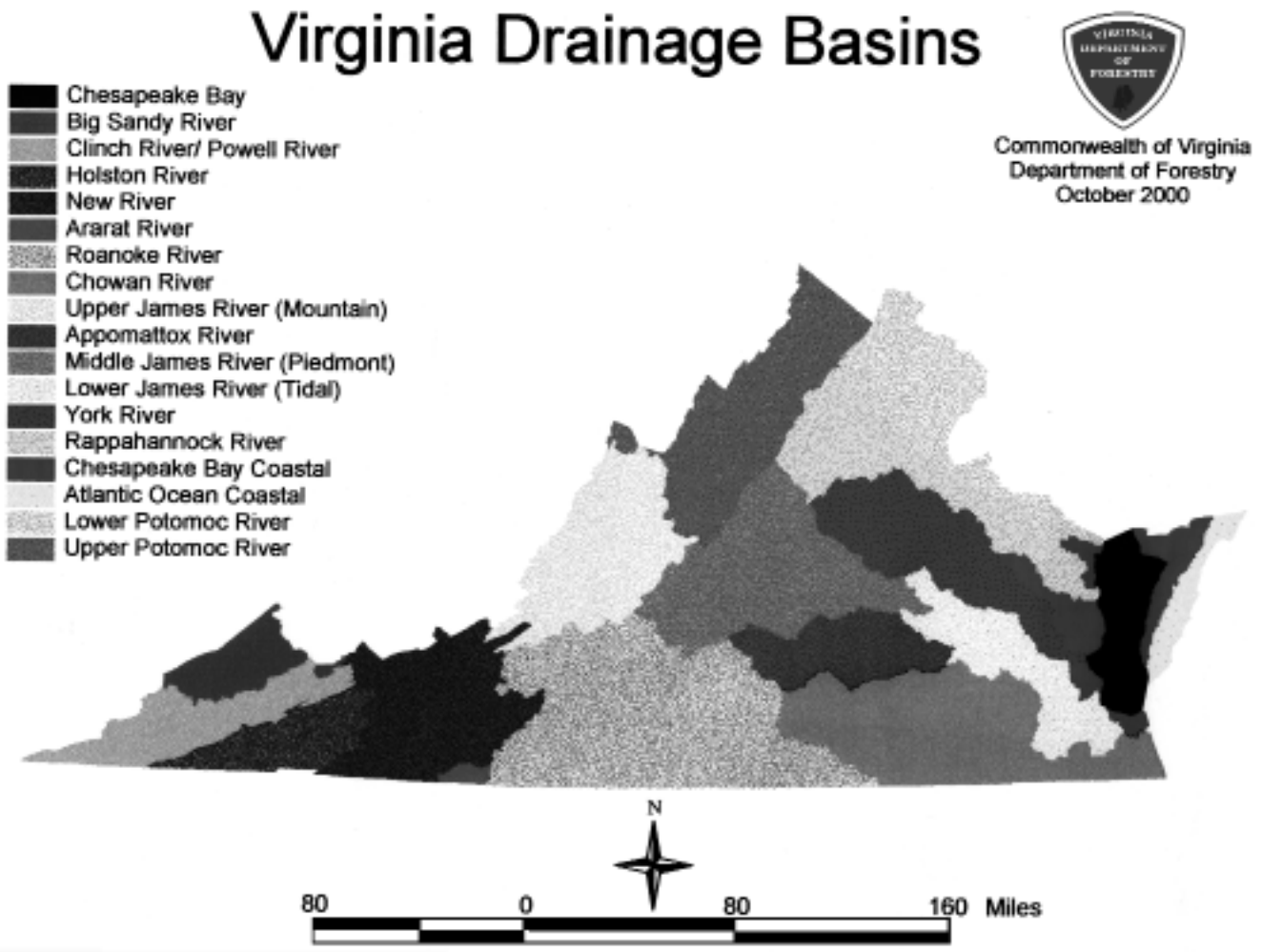


Figure 9. Hydrologic Unit Map

- embrace the land conservation movement including the Forest Legacy Program as a means to reduce fragmentation effects with emphasis on forest management as an integral core element;
- begin managing smaller tracts more intensely, i.e. woodlot management.

WATERSHED VALUES

The surface drainage systems are important factors in determining the biotic diversity of the state. Mountains, valleys, plains, and streams all can facilitate the migration of plant and animal species into a region or serve as barriers to dispersal. The general northeast-southwest grain of the land has enabled species to shift their ranges north or south or upslope or downslope in response to warming or cooling climactic conditions. Part of the species richness of Virginia stems from the occurrence of northern (boreal) species at or near the southern limits of their ranges and southern species at or near the northern limits of their distributions (Woodward and Hoffman, 1991).

The surface drainage of Virginia is divided into west-flowing and east-flowing streams. One-fourth of the state's land area, roughly west of Roanoke, drains to the Gulf of Mexico via the Big Sandy, Tennessee, and New-Kanawha river drainage systems. The remaining streams flow east to the Atlantic. The eastern continental divide is the most important boundary in the distribution of fishes and aquatic invertebrates in Virginia. Figure 9 shows the Hydrologic Unit Map for Virginia.

VIRGINIA'S FORESTS: CULTURAL HISTORY WITH HISTORICAL USES AND PROJECTED USES

Virginia is an area renowned for it's history. Known as the birthplace of presidents, it is rich in American history. However, its natural and geologic histories are rich as well. The topography of Virginia ranges from mountainous slopes to flat coastal plains. Its forests hold a long succession of distinct ecosystems with varied biological diversity. Its people have maintained a long partnership with the land, evolving from moderate use by Native Americans to heavy use by European settlers.

GEOLOGIC HISTORY

There are five distinct geologic regions in Virginia. From east to west, they are the Coastal Plain, Piedmont, Blue Ridge, Ridge and Valley, and the Appalachian Plateau. Approximately 600 million years ago these regions began to form while a small sea covered Virginia. For 300 million years sediments collected in this shallow ocean, and the earth's crust continued to sink under the accumulating sediment. Then, about 150 million years ago Virginia experienced a period of orogeny, or mountain building, at which time the massive sediment layers rose to the surface. There they were folded and faulted to form the Appalachian Mountains. In the ensuing period, faulting formed the Triassic Basins in the Piedmont region of Virginia. Since that time, erosion has continually shaped Virginia's topography, slowly breaking down the western mountains and depositing more sediment on the eastern Coastal Plain (Sherwood, 1977)

NATURAL HISTORY

More than 12,000 years ago, humans came to North America by crossing a narrow land bridge over the Bering Strait from Asia. The climate was cold, freezing a great deal of northern water in glacial ice, allowing people to disperse over the North American continent for several generations. Man was almost certainly in Virginia by the Wisconsin Ice Age. At this time, a small glacier covered the Blue Ridge Mountains. Ground not overlain by ice would have supported tundra life forms such as grasses, lichens, mosses, and other small plants. Further east, grasslands and brushlands, and perhaps even a few birch and evergreen trees covered the Piedmont region. Large animals roamed Virginia, due to their ability to conserve heat. Large bison, mastodons, woolly mammoths, caribou, musk ox, and ground sloths inhabited Virginia alongside early human inhabitants (Lambert, 1989).

By Paleolithic times the climate had warmed enough to change the characteristic flora of the area. According to pollen studies, trees were flourishing in all regions of Virginia. Some of these species include: fir, cottonwood, alder, ash, aspen, birch, blue beech, hemlock, hickory, ironwood, oak, pine, and spruce. Approximately 11,000 years ago a mixed coniferous-deciduous forest supplanted the open spruce boreal forest. The Virginia landscape then supported species such as ash, birch, fir, hemlock, hornbeam, oak, and white pine (Brush, 1990).

The fauna in Virginia had changed as well. Smaller mammals such as deer, elk, and moose gradually replaced giant mammals. At this time people tended to populate the valley bottoms, where weather conditions were milder than in the mountains (Lambert, 1989).

Then, around 8,000 years ago the climate warmed, and human populations grew. People spread to the mountains, which were not so harsh since the warming. With the advent of warmer temperatures also came more distinct seasonal changes. Small groups of people migrated to different geographic locations with during the warmer seasons (Lambert, 1989).

VIRGINIA'S FORESTS

Forests naturally undergo a process known as forest succession. There are two types of succession: primary and secondary. Primary succession begins when a new substrate is produced. This occurs in situations such as the eruption of a volcano or the retreat of a glacier. In each case, new land is available for habitation by plant species. Secondary succession begins with the clearing of previously vegetated land. This process can be triggered by natural events such as fire or severe storms. It can also come about due to human influences such as clear cutting.

In Virginia, the main type of succession is secondary. A common succession series would begin with trees such as sassafras and pines. Both are trees that require large amounts of sunlight. In lowlands, one would expect early succession to consist of shortleaf pines and loblolly pines. In higher areas, pitch pines and eastern white pines are more likely to grow. As these trees grow they create a relatively more sheltered and shaded environment, perfect for dogwoods, sourwoods, and maples to grow. These trees in turn provide even more shade, encouraging hardwood trees such as oaks, chestnuts and hickories to grow. Eventually the trees present later in succession mature to a height well above the earlier trees, thus blocking the sunlight they need to survive. It is in this way that the latter successional trees become dominant (Silver, 1997).

A common misconception exists that Virginia's old growth forests have only recently been depleted. In fact, people have been harvesting Virginia's forests for hundreds of years. Since settlers arrived in Virginia, species composition has progressively changed from old growth hardwoods to species associated with younger forests. Captain John Smith noted seeing huge cypress and oak trees in 1607 (Mountford, 1997). Some other species witnessed were ash, cedar, chestnut, cypress, elm, poplar, red oak, white oak, and walnut (Silver, 1997). These trees were of high economic value in Europe at the time, so their presence may have overshadowed reports of abundant softwoods such as loblolly pines, but they were present nonetheless.

At the time of Smith's observation, the forest composition of each region in Virginia can be ascertained. The Coastal Plains were predominantly southern mixed hardwood forests, with oaks and hickories growing on higher, drier grounds, and Atlantic white cedars, bald cypress, gums, and maples in the lower, wetter areas. The Piedmont region supported yellow poplar, oaks, and hickories (Silver, 1997). Native Americans performed habitual burns in these forests to clear out the dense understory that naturally over-

took the forests (Mountford, 1997). The mountainous regions were characterized by hardwoods such as oaks and chestnuts (Silver, 1997). These regions were not burned as regularly, so their thick understory made navigation difficult for early settlers (Mountford, 1997).

By the beginning of the 19th century observers in Virginia noted tracts of pine 100 to 200 acres in size growing within oak forests. This was due to periodic disturbance that created canopy gaps. Cedar, cypress, and white oak were notably expensive and in short supply. These trees were popular sources for marketable wood products. As cedar and cypress were removed from swampy forests bays other hardwoods usually replaced them. The individual effects of over-harvesting a species varied, but the combined effect was to decrease the abundance of species growing in latter successional forests and increase the abundance of early successional species (Silver, 1997).

At the beginning of the 20th century disease took its toll on the American chestnut tree. Introduced by imported Chinese chestnut trees, the blight had infected and killed the last of the American chestnuts in Virginia by the early 1940's. Efforts are still being taken today to restore the American chestnut (Dierauf, Department of Forestry).

By 1940 commercial forest covered only 56% of the total land area in Virginia (25.5 million acres). These forests covered 14.4 million acres, but old growth forests comprised only 2% of that land. The remaining 98% of the forests were second growth forests, and only 5% of those forests were in reproduction stages. The state still had more hardwoods than softwoods, with 8.2 million acres and 6.2 million acres, respectively. The species composition had changed slightly, as well. Anthropogenic, or human induced factors, were now more important to species diversity and forest age than natural disasters such as fire and storms. In 1940 the five major species groups found in Virginia were oaks, gums and yellow poplars, other hardwoods, yellow pines such as Virginia pine, loblolly pine, and shortleaf pine, and other softwoods. Loblolly pine and bottomland hardwoods, with a scattering of upland hardwoods predominantly covered the coastal plain. The piedmont region supported upland hardwoods, Virginia pine, and shortleaf pine. The mountainous regions were composed of upland hardwoods, white pine, and cove hardwoods (Lotti, 1942).

In 1957 Virginia had 15.4 million acres of commercial forests. Between 1957 and 1977 Virginia's commercial forests had grown in size by approximately 600,000 acres. However, by 1986 forests had declined in size by 551,000 acres. By 1992 it had further declined by 122,000 acres. Therefore, in this 35-year period the forest area had a zero overall change but some fluctuation.

The forests were cut down for agricultural use from the time of early settlement until the 20th century. Following this decline in forest acreage, the conservation movement provided for protected state and federal forests. Now, with the period of rapid population growth and urban development, there is a corresponding decrease in forest area.

COLONIAL FARMING AND FOREST DEPLETION

At the time of European settlement in Virginia, Native Americans had long established practices concerning forest management, and farming methods. For the most part, they obtained food from hunting and gathering methods. Probably only one quarter of their diet consisted of agricultural products. Native Americans dwelling in woodlands used at least 130 species of wild plants for food and over 275 plant species for medicinal use (Lambert, 1989).

Around 1000 years ago agriculture became prevalent. Land was prepared for agriculture by burning or girdling an area of trees. Once the trees died they were left standing. This practice allowed enough sunlight to pass through to the crops, and also encouraged reforestation upon abandonment of the agricultural site (Mountford, 1997). Digging sticks and hoes made out of animal bones were used to plant corn hills. When the shoots sprouted vine beans and gourds were planted to meander among the corn hills. Sunflowers were often planted along the northern edge of garden plots, and tobacco was a frequent crop as well. These farming methods had little effect on the size of Virginia's forests. Forest quality was high, due to the non-invasive nature of Native American society.

The need for tree products was minimal. Saplings were used for making a framework for shelters, as well as for tools and weapons (Lambert, 1989). Firewood was gathered from naturally fallen trees on the forest floor (Mountford, 1997).

Forests, however, were well-managed areas. Native Americans were performing controlled burns to clear small areas for agricultural use. Fires removed understory from old growth forests for easy hunting access, and also produced "edge effects." Controlled burns created transitional areas along the margins of different ecosystems where wildlife congregated, and encouraged the growth of plants that respond to fire such as blueberries (Lambert, 1989). Fires also drove game to the edges of forests, which facilitated hunting.

Once European colonists arrived, Virginia's forested land changed dramatically. Philosophically, forests were seen as wild places that needed to be tamed. More important to the first wave of colonists, though, was subsistence. The first European crops grown in Virginia, from the 1580-1680's, were planted to provide food for personal survival. Most farmers could tend no more than three to five acres of land at one time (Miller, 1986). Any surplus crops were either exchanged with tradesmen who did not grow enough food for their families, or exported (Mountford, 1997). Colonists adapted burning and girdling methods from Native Americans, which were quite different from farming methods used at that time in Europe (Walsh, Colonial Williamsburg). This method is often referred to as "slash and burn" agriculture, and employed a long-term fallow system of land management. After girdling, the area was burned to clear away litter. Trees were left standing in place until wind knocked them over, and they could be more easily carted away for firewood.

The exposed soil was rich in nutrients, and could be broken with a hoe. Popular crops at this time were corn and tobacco, which were planted in a series of small mounds similar to the method used by Native Americans. Land was usually farmed until productivity was exhausted, after about six or eight years, then abandoned for a new, more productive site. In the ensuing period early successional forests reclaimed old agricultural sites. After 20 or 30 years of lying fallow the land was sufficiently fertile again, and was once again ready for "slash and burn" planting (Miller, 1986).

Virginia's colonial population grew rapidly. In 1650 there were approximately 700 colonists, but by 1800 there were 1,150,000 colonists (Census Office, 1960). As populations increased, settlers switched to a crop rotation system of land management. To support the influx of people, farmers in the 1690's through the 1840's gradually switched from hoeing small patches of land to plowing larger tracts of cleared forests. Land was no longer allowed to rejuvenate by lying fallow. Instead, crops were rotated annually with peas, beans, corn, and small grains. Seeds were planted in flat plowed rows instead of the foot high mounds previously made by hoes, and tree stumps were removed before planting. The recently introduced use of slaves, as well as plows, increased the number of acres a farmer could manage during a growing season. As a result of these changes, tobacco production soared in the latter part of the 18th century (Miller, 1986).

EFFECTS OF CUTTING FORESTED LAND

Increased crop production took a toll on the land. Soil fertility diminished, and farmers had to fertilize their fields with plaster of Paris or manure in order to prolong the land's agricultural productivity. Virginia's forests were cleared at a rapid rate to make room for more agricultural land. Trees were cut in order to build houses for these new residents, and to heat the homes as well. Fresh water and sediment input to Virginia waterways increased as an unfortunate consequence of the deforestation. As the fertility of the land was exhausted, people were forced to abandon their farms and move from the Coastal Plain to the Piedmont and even out of Virginia, into less mountainous areas with less erosion (Miller, 1986).

Colonists concluded that the most fertile land was the forested land with the biggest trees. The soil there must be more fertile since it supported such big plants. The first harvests from virgin forest soil further supported this idea. Unfortunately, early Virginia farmers were spoiled by the abundance of fertile soil, and they mined it as one would mine a metal, without replacing what they had taken. This led to short term agricultural planning lacking sustainable design. Over short periods of time farmers witnessed decreases in soil fertility, loss of soil due to erosion, and lower crop yields (Percy, 1992).

IMPACTS OF TECHNOLOGY ON VIRGINIA'S FORESTS IN THE 19TH AND 20TH CENTURIES

In the 19th century, settlers pushed west through the Piedmont and mountainous regions of Virginia. With them they brought the old notion of measuring progress by the amount of untamed forest they converted to pastoral and agricultural land. What was happening to all of these felled trees? Most of it was used for firewood. In fact, at this time eighty to ninety percent of the wood removed from forests was used for fuel. The remaining lumber was used as building material (Burdette, 1996). However, this progressively changed throughout the 19th century.

With the advent of more efficient cast-iron wood burning stoves in the mid-1800s, the demand for firewood diminished. Nevertheless, a number of factors increased the demand for raw lumber in the United States. Early in the 1800's the production of turpentine, pitch, and wood stores for ships placed a heavy demand on the timber industry, as did the production of steamboats, naval ships, and locomotives and the railroads they followed (Burdette, 1996). Wood was the principal train freight in the 1830's and 40's. Coal soon replaced wood as a domestic and industrial fuel, and steel rails replaced part of the earlier all wooden rail design. Nonetheless, coal mines required millions of trees to provide internal mine shaft structures, and wooden sleeper crossties were still necessary for railroad construction (Dixon, 1986).

Until 1820, colonists used small sash-saw lumber mills powered by water wheels to process lumber. These mills could manage no more than three thousand board feet per day. Then, in 1820 the steam-powered circular-saw mill was invented. Circular saws could process much more wood, and placed a greater demand on Virginia's forest resources. After the Civil War large band mills replaced many of the circular-saw mills. Their greater capacity for producing lumber placed an even higher strain on the state's rapidly diminishing virgin forests. In 1909 Virginia processed 2.1 billion feet of lumber, which placed an extraordinary strain on statewide timber resources. By World War I the majority of Virginia's virgin pine and hardwoods had been cut, leaving only lower quality second growth forests available. Large band mills were not well suited for processing this poor stock; so smaller, portable circular saw mills powered by gasoline or steam replaced them (Craig, 1949).

Virginia's demands for forest products matched or exceeded the technological advances that allowed drastic increases in lumber processing capabilities. Along with the increased demand on Virginia's forests to provide wood for the railroads, steamboats, and ships, was the growing need for lumber to house Virginia's steadily increasing population. In the 1860s the Civil War wreaked havoc upon Virginia towns. During their reconstruction, a new method of building construction using a 'balloon frame' was introduced. This method used lumber cut to standard dimensions, used nails instead of posts, girts, beams, and braces, and was much faster than traditional framing methods. At the same time, technological advances in sawmills allowed sawing equipment to become faster and cheaper, and new developments in nail production machinery dropped the price of nails. Population growth and technology were concurrently draining Virginia's forest resources (Burdette, 1996).

TRENDS IN FORESTRY

Forestry and silviculture as a modern practice began in Europe in response to severe wood shortages. For centuries the continent had been experiencing the widespread conversion of forests to agricultural land. Many woodlands no longer supported old growth hardwoods and other marketable tree species. The effects of clear-cutting were taking their toll on the soil and streams, and many of the remaining trees were afflicted with insects and diseases. Against the better judgment of early European foresters such as Heinrich Cotta, G.L. Hartig, Bernard Lorentz, and Adolphe Prade, clear-cutting and replanting was the first stan-

dard forestry practice. Later, flexible cutting methods were introduced, monoculture planting was discouraged, and commercial cutting was supervised by professional foresters (Robinson, 1988).

With the advent of the US Forest Service and the Virginia Department of Forestry (VDOF) came organized forest management policies in Virginia. In the early 1900s Virginia's forests had not suffered the same extent of damage as those in Europe. Nonetheless, forest health had greatly diminished since European colonization. Early forestry efforts concentrated on suppressing forest fires, replanting damaged forestland, and educating the public about fire prevention and forest practices. The Virginia Department of Forestry concentrated its efforts on building fire towers, forest fires, and preparing seedlings for replanting denuded areas.

By the 1940s the VDOF had expanded its efforts to include not only forest protection, but also forest quality. In 1940 the US Forest Service published the first Virginia forest inventory. This publication assessed statewide forest resources, tracked logging and mill activities, and identified problems in current forest management. This was the first of many forest inventories for Virginia.

By the late 1950s foresters had changed their attitude toward forest fires. Around this time foresters began to appreciate the value of forest fires in Virginia's forests. General policy switched from preventing all forest fires to advocating controlled, prescribed burns. Oak forests and some pine species especially benefited from this new attitude. Many plant species depend on periodic forest fires to regenerate and clear out underbrush that competes with them for limited soil nutrients. Complete fire prevention had saved many tree species from destruction, but had hurt the species that depended on fire for survival (Sarvis, 1993).

Today the VDOF mission statement reads: "Protect and develop healthy, sustainable forest resources." They still educate the public about forestry practices and

forest fires. Their focus has expanded to include water quality management and forest health, scientific research in forestry and silviculture methods, and forest management advice to private landowners.

Forest land based conservation has emerged as a leading issue due to the increasing urbanization and resulting forest fragmentation.

CURRENT AND FUTURE OWNERSHIP PATTERNS

DEMOGRAPHICS PATTERNS AS THEY RELATE TO FOREST FRAGMENTATION

Higher human population densities tend to fragment the forest, fragment ownership of forestland, and pose more land-use conflicts to harvesting and sustainable forest management activities. At about 50 people per square mile, managed forests essentially disappear. There is no absolute population density with which this occurs. Land use patterns, topography, economics, and social attitudes all contribute to variations of the impact of population on forest management activities (Scrivani and Liu, 1996).

Current population trends are shown by the *Virginia Forest Resource Assessment Map* in Figure 8. Virginia had a population of 6.6 million people in 1995. Among the 50 states and the District of Columbia, Virginia ranked as the 12th most populous. Over the next three decades, Virginia's population is expected to increase by 1.8 million people. This projected population percentage increase is 27.9% and ranks as the 18th largest nationwide. In addition, Virginia is expected to gain nearly 300,000 people from internal migration from 1995 to 2025. Figure 10 shows the growth in Virginia from 1990 to 1999 (U.S Bureau of the Census, Population Division, Listing #47). Currently, 12.5%

LEGISLATION AFFECTING VIRGINIA'S FORESTS AND THE CREATION OF GOVERNMENT LANDS

Population expansion and technological demands affected forests across the United States. Just before the turn of the century concerned citizens across the country started the conservation movement, which advocated federal regulation of land to promote the best use of land for the greatest common good for the longest period of time. Congress responded to this movement by passing legislation designed to protect and manage designated areas of land.

Below is a timeline of events outlining this legislation with the emphasis on Virginia and the Virginia Department of Forestry:

TIMELINE

1891 Congress enacts the Forest Reserve Act, allowing the President to conserve forested land and protect watershed by withdrawing it from the public domain. This is the beginning of the National Forest System.

1897 Congress passes the Organic Act, promoting multiple-use forestry and sustained-yield timber management.

1905 National Forests are placed under the management of the Bureau of Forestry in the Department of Agriculture.

1911 Weeks Act – George Washington/Jefferson National Forest purchases

1914 The first State Forester in Virginia is established. This is the beginning of what is now known as the Virginia Department of Forestry.

1916 The National Park Service is created.

1919 Prince Edward-Gallion State Forest becomes the first Virginia State Forest.

1922 Congress gives the Forest Service its first recreation budget.

1933 The Civilian Conservation Corps is created under the New Deal. They work on Virginia's National Parks, the Fire Trail system, and recreational development in Virginia's forests.

1934-41 Emergency Conservation Work program acquires national forest land in Virginia.

1940 Brush Burning Law is passed.

1950 Seed Tree Law is enacted.

1960 Congress passes the Multiple Use and Sustained Yield Act. As a result, the Forest Service hires non-timber personnel, and emphasizes recreational use of forests.

1970 Reforestation of Timberlands Act is passed.

1990 Farm Bill authorizes Forest Legacy and Urban and Community Forestry Programs

1996 Amended Farm Bill authorizes State Grant option

of the non-federal land base is developed with 920,800 acres developed from 1982-1997.

Several factors help to show that Virginia's population will continue to show significant increase. First is the impact of a well-developed road network including many interstate miles. The I-95 "urban corridor" and the I-64 "Golden Crescent" are examples of the well-known pattern of major growth following interstate corridors. Many counties with intestate corridors grew by as much as 20% during the 1990's. The three slowest growing areas in Virginia, namely, Southwest, Southside, and the Northern Neck, all are at least one county away from an interstate.

Second, a phenomenon known as "rural rebound" is occurring in Virginia. Rural counties who were losing population during the past several decades are now gaining population. Most of this gain is located in counties in the peripheries of larger metropolitan areas. However, like the nation as a whole, 78% of Virginia's population lives in metropolitan areas. The suburbs have the highest net migration of any area with half the total population of the state. Among 59 non-metropolitan counties, 37 share a border with at least one metropolitan locality. Seventy percent of the rural growth in Virginia has been in these metro-bordering counties (Martin and Tolson, 1999 Virginia Population Estimates, UVA Weldon Cooper Center for Public Service). The average 1990-1995 population growth rate is 12.8%. The outward population spread from urban centers is a well-established pattern that continues to play a large part in determining growth patterns.

State and federal programs designed to increase forests have not kept pace in the forestland loss. For example, the Conservation Reserve Program (CRP) increased forest land by 70,000 acres over a 15 year period while development consumed 280,000 acres during the same 15 year period (NRI data).

FEDERAL LAND OWNERSHIP IN VIRGINIA

The George Washington and Jefferson National Forests represent the single largest blocks of forestland in Virginia. The combined forests comprise more than 1.7 million acres of public land. National forests differ from national parks and other federal lands in management concept. The

Figure 10

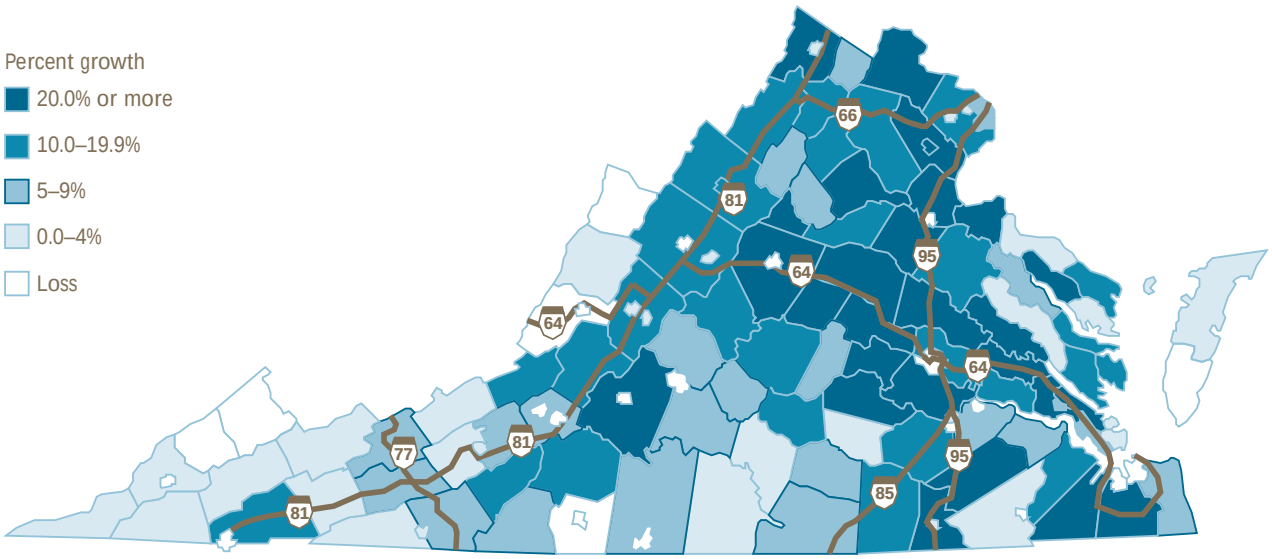
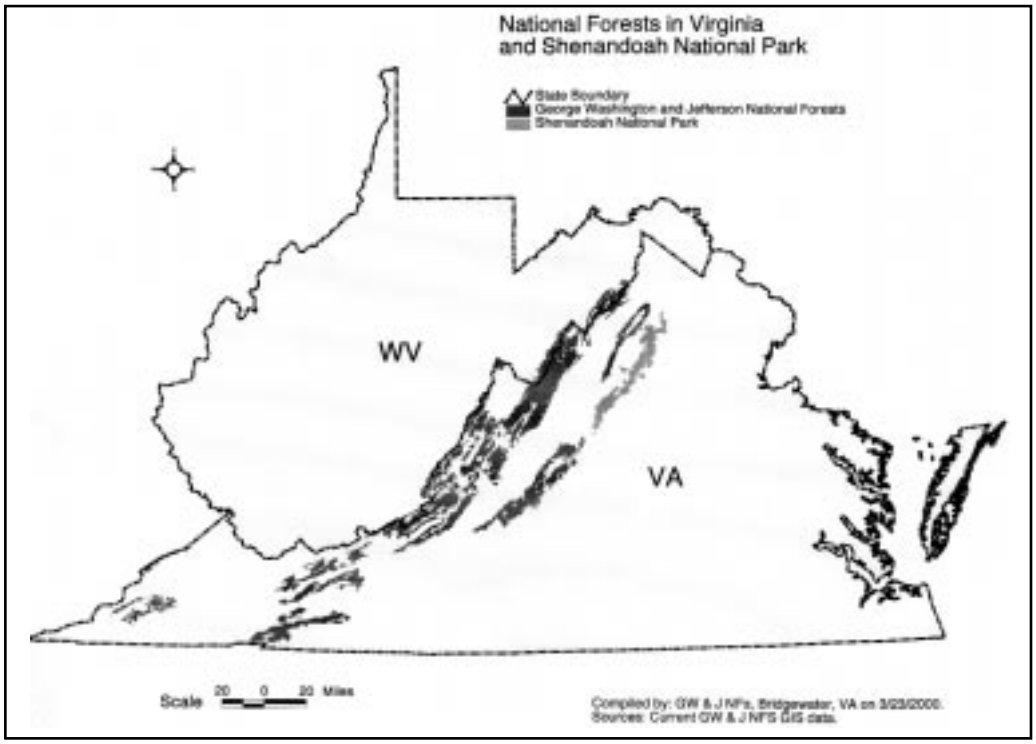


Figure 11



multiple-use, sustained yield concept ensures the continued provision of forage, recreation, timber, water, wilderness, and wildlife resources. There are 15 designated wilderness areas in Virginia's national forests. Figure 11 shows the extent of national forest and national park ownership in Virginia.

Both the George Washington and Jefferson National Forests were created after the signing of the Weeks Act in 1911. This Act allowed the federal government to purchase deforested mountain land and protect it for watershed purposes. The first units of the George Washington National Forest were purchased in 1917 and the first units of the Jefferson in 1911.

Significant federal ownership also occurs in Department of Defense ownerships like Fort A.P. Hill, Fort Pickett and Camp Peary.

VIRGINIA'S URBAN FOREST

The rapid pace of development and land consumption has caused the rural-urban forest resource interface to be extremely important to the overall forest resource base. Over the last 10 years, there has been an increasing awareness of the value of urban forests, tree planting, and open space protection in metropolitan and suburban communities.

Since 1990, the US Forest Service and Virginia Department of Forestry has provided technical assistance and networking opportunities to citizens and non-profit organizations involved in urban forestry issues. The Department continues to support local "Tree Steward" organizations through training and grant support. A "Virginia Community Tree Planting Initiative" has begun for communities with less than 25,000 population.

In conjunction with the Forest Legacy effort, the Department of Forestry has cooperated with American Forests to co-sponsor City Green analysis for two Virginia areas. City Green is a computer modeling analysis which documents the value of urban forests. Furthermore, a series of forest fragmentation workshops have been sponsored with the Western Virginia Land Trust.

Currently, the Department of Forestry has 22 International Society of Arboriculture certified foresters and one urban and community forester coordinator. Progress in the urban forest arena occurs with an extensive community grants program.

EXISTING MEASURES TO CONSERVE FOREST LAND

A wide array of land conservation tools are available in Virginia. None focus strictly on forestland with the main focus on "working farms" and/or historical tracts. The following is a more detailed description of two state agencies and one private non-profit groups that possess land conservation missions.

VIRGINIA OUTDOORS FOUNDATION

The Virginia Outdoors Foundation (VOF) was established in 1966 by the Virginia General Assembly to conserve and protect Virginia's scenic, scientific, natural, historic, recreational, and open-space areas for the benefit of the public. It is the oldest state agency in the country associated with conservation easement purchase. The primary mechanism for accomplishing this mission is the open-space easement program. VOF staff and the Board of Trustees evaluate a potential easement to determine whether the preservation of the property in open-space will be of benefit to the citizens of the Commonwealth. The easements must be consistent with local land use planning. VOF also accepts monetary gifts and gifts of land and securities which are tax-deductible. The land approved for open-space easement remains in private ownership.

VIRGINIA LAND CONSERVATION FOUNDATION

This foundation was set up in 1996 and has a Board of Trustees composed of members of the General Assembly. Agency heads and staff make up an advisory group to the Board. Proposals are submitted to the advisory group and evaluated using a scoring matrix in various categories including agriculture, forestry, historic, etc.

Funding for this foundation was at 1.75 million in 1999 and 6.25 million was approved for the Year 2000.

THE NATURE CONSERVANCY

The Nature Conservancy is the country's largest non-profit conservation organization. Its role is to protect plants, animals, and natural communities that represent the diversity of life on earth. The Nature Conservancy has offices in all 50 states with three offices in Virginia.

Most notable and innovative of these efforts is the Clinch Valley Forest Bank Project originating in Abingdon, Virginia. The mission of the Forest Bank is to promote the economic productivity of working forests while protecting the ecological health and natural diversity of the landscapes in which they occur. This concept works by having the landowner make a "deposit" in the bank by permanently transferring the right to manage and harvest timber. The landowner receives an annual income based on the value of the timber deposited, a guarantee that the land will remain in "working forest", and the right to withdraw the value of your deposit in cash whenever one needs it.

VIRGINIA'S LAND TRUSTS

Virginia has many major land trusts active in land conservation efforts. The following are a listing of some of the major trusts:

Valley Conservation Council
Western Virginia Land Trust
Williamsburg Land Conservancy
Friends of the Dragon Run
Middle Peninsula Land Trust
Friends of the Rivers of Virginia
American Farmland Trust
Blue Ridge Conservancy
Potomac Conservancy
Conservation, Inc.
Preservation Alliance of Virginia
Chesapeake Bay Foundation
Piedmont Environmental Council
James River Association
Trust for Public Land

THE PUBLIC PARTICIPATION PROCESS

As part of the Forest Legacy program, and as listed in Forest Legacy Guidelines, the public has a role in determining in which geographic areas the Forest Legacy program will be focussed. The Institute for Environmental Negotiation (IEN) at the University of Virginia was contracted on May 23, 2000 to provide assistance to the Virginia Department of Forestry (DOF) in developing a meaningful public involvement process for the Virginia Forest Legacy Program.

A key aspect of the approach taken by IEN was the establishment at the outset of a "Stakeholder Reference Committee" composed of representatives from major stakeholder interests. Throughout the process, the IEN worked closely with the DOF and the Stakeholder Reference Committee on every

aspect of the public involvement design, from the size and nature of the public meetings, people invited, location of meetings, to the information handouts and feedback questionnaire.

The goals for the Virginia public involvement process were twofold: (1) to provide information to stakeholders and the general public about the Forest Legacy program, and (2) to elicit any concerns, suggestions and general comments about Forest Legacy.

The IEN sought to ensure that the Forest Legacy public involvement reflected the seven Core Values for Public Participation adopted by the International Association for Public Participation (IAP2):

- People should have a say in decisions about actions which affect their lives.
- Public participation includes the promise that the public's contribution will influence the decision.
- The public participation process communicates the interests and meets the process needs of all participants.
- The public participation process seeks out and facilitates the involvement of those potentially affected.
- The public participation process involves participants in defining how they participate.
- The public participation process communicates to participants how their input was, or was not, utilized.
- The public participation process provides participants with the information needed to participate in a meaningful way.

Public Involvement Process

Stakeholder Reference Committee: During the initial design phase, IEN worked collaboratively with the DOF to establish a Stakeholder Reference Committee. (Members listed in Acknowledgements) The Committee members were drawn from the state-level Stewardship Committee, per the recommendation of the State Forester and included representation of four Virginia land trust and conservation organizations, two stewardship landowners, one forest industry association, one academic institution, three state agencies, and the U.S. Forest Service. The State Stewardship Committee approved the creation of a separate Forest Legacy subcommittee to oversee the Assessment of Need development.

Meeting Locations and Design: *Several models for public involvement meetings were proposed, including large public meetings, regional meetings, and smaller invitation-only regional Focus Groups. The IEN surveyed the public involvement processes conducted by other states, and presented a written summary of these to the Stakeholder Reference Committee. In discussion with the Stakeholder Reference Committee, it was decided to hold meetings in different parts of the state using the invitational Focus Group model combined with newspaper ads to encourage any interested member of the public to attend. These meetings would be called "Focussed Public Discussions" as they were envisioned as a hybrid between Focus Groups and larger public meetings.*

The reason for inviting a selected list of people was that public meetings often do not draw sufficient participation from a diverse range of stakeholders. Conversely, it was felt that the meetings should not be closed and that any interested member of the public should be allowed to attend. It was hoped that the best of both meeting models would prevail. It was agreed that the meetings would be held in seven key locations around the state, to enable as great representation of the different regional interests as possible. The timing of the meetings was debated, and ultimately the decision was made to hold the meetings during the daytime because it was felt that this would be more favorable for key stakeholders, such as landowners, staff of conservation and environmental organizations, and local government staff. As a result, six out of the seven meetings were held during the day. (See map in Appendix C for a list of meeting locations, dates and times.)

Stakeholders: With the assistance of the Stakeholder Reference Committee, the following list was created of stakeholder interests that should be represented at each of the regional meetings, if possible.

- *Federal, state and local government officials (including elected officials)*
- *Environmental groups, Private landowners (range of ages)*
- *Conservation organizations and land trusts*
- *Forest industry*
- *Other local interests (e.g. hunters, wildlife preservationists)*
- *Chambers of Commerce*
- *Academia*
- *Youth (FFA, college students, etc)*

An invitation list was created for each of the proposed regional meetings, using names provided by the Virginia Department of Forestry Regional Foresters as well as names provided by the Stakeholder Reference Committee. Additional names were often suggested by other invitees. (*See list of actual participants and invitees in Appendix C.*) Because these lists of invitees were not completely assembled until mid-July, and the seven meetings were held beginning in the third week of July through the second week in August, many invitees were not able to be contacted or could not attend. Nevertheless, a great effort was made to ensure diverse representation, which is reflected by the list of actual participants. Lastly, it is important to note that advance newspaper advertisements in five out of the seven locations successfully attracted a handful of other interested people to attend.

Other Outreach: *Several other modes of outreach were engaged in this public involvement process. An effort to inform the Virginia public about Forest Legacy was made through the distribution of a news release to the papers where meetings were to be held, simultaneous with the placement of meeting advertisements. Another effort to inform interested Virginia stakeholders was made by the release of an informational e-mail and feedback questionnaire through an e-mail "tree," in which key organizations and contacts were asked to distribute the e-mail to their memberships and networks. Lastly, a web page was created so that people could access the same informational handouts and public feedback questionnaires.*

Agenda of *"Focussed Public Discussions:"* Our goal was to obtain both qualitative information through verbal discussion and information that could be quantified through a written feedback questionnaire. Each meeting lasted 2-1/2 hours and followed the same agenda, to ensure consistency. (*See Appendix C for a sample meeting agenda.*) While some meetings were characterized by lively debates between differing viewpoints, others were notable for the consensus that readily emerged on significant topics. Each meeting yielded additional significant information for the Virginia Forest Legacy program, whether it was concerns about the program or specific suggestions for making an effective program.

Final Review By The Stakeholder Reference Committee: Upon completion of the seven regional meetings, the IEN compiled the results of the written questionnaires as well as the concerns and suggestions that emerged during the verbal discussions (*See "Responses From Public Feedback Questionnaires, as well as Appendix C*). It also compiled questions that could not be answered during the meetings, and called the Indiana Forest Legacy program manager to obtain answers to these questions. A preliminary report of findings was presented to the Stakeholder Reference Committee on August 14, 2000 for review and discussion. This final report reflects the decisions and recommendations made by the Stakeholder Reference Committee at its final meeting.

Final Outreach to Stakeholders: This final report will be sent by the DOF to all participants in the Forest Legacy public involvement process as soon as is practicable, and no later than the end of August 2000. Participants will be invited to submit comments to the DOF for consideration in the further refinement of the Forest Legacy program.

VIRGINIA DESIGNATED FOREST LEGACY AREAS WITH DESCRIPTIONS

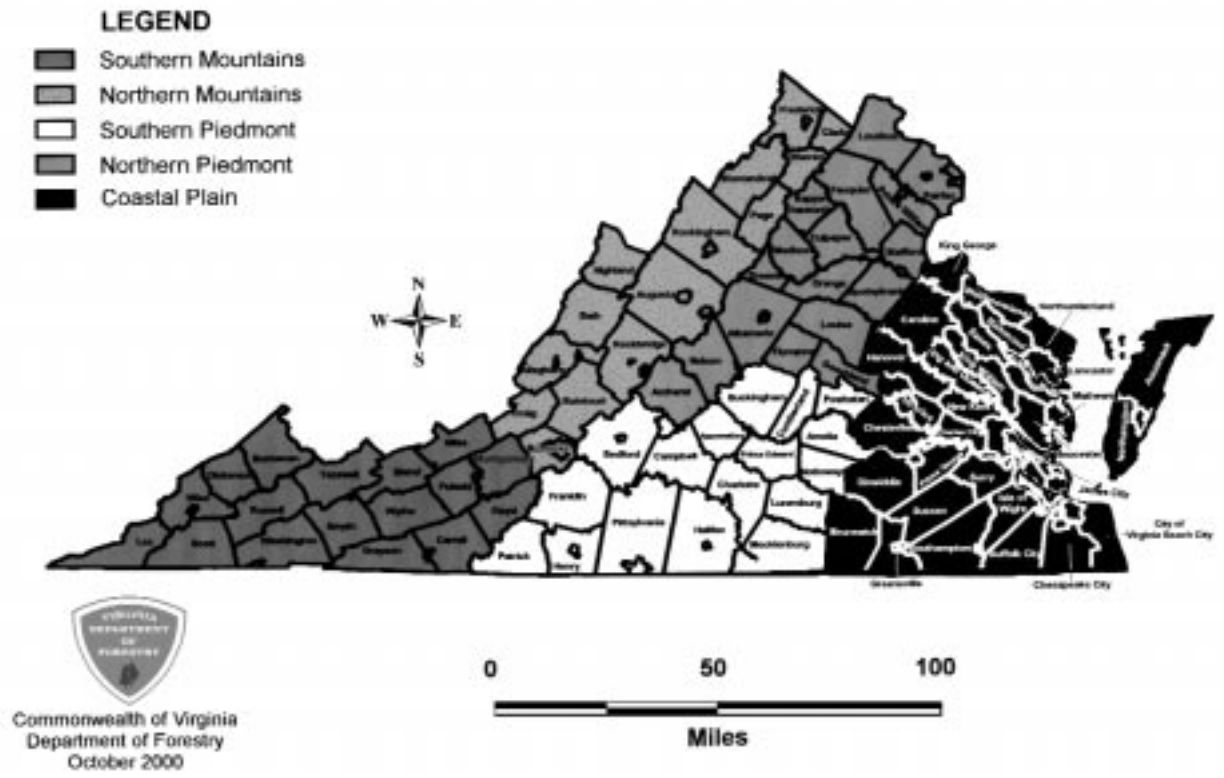
As identified previously in the federal code, the Forest Legacy Program involves the identification of forest lands within Virginia threatened by conversion to non-forest uses. A multi-step inclusive process was utilized to help determine how the Forest Legacy Program should be pursued in Virginia.

The Forest Legacy subcommittee of the State Stewardship Committee was instrumental in developing the original strategy for implementation of Forest Legacy. Several of their original thoughts regarding the Forest Legacy Program remained true throughout the public input process. One of the key elements of these discussions was the incorporation of the entire Commonwealth of Virginia into the Forest Legacy Program. As indicated in the public input analysis, this theme was consistent throughout the process. The Virginia Department of Forestry concurs with this the inclusion of the entire state based on the additional following information developed in the *Virginia Forest Resource Assessment*:

- Virginia is diverse in forest types, habitat and consequently, in species richness
- All portions of Virginia contribute significantly to timber production, the 2nd leading industry
- Population growth and threats to conversion are widespread and exist in all areas of the state
- The location of "impaired waters", as shown by the Section 303 (d) list, occur statewide
- Strong partnerships with land trusts exist statewide who will assist in "packaging land parcels" with other known parcels

Consequently, the Forest Legacy subcommittee, in conjunction with the State Forester, recommends the creation of five Forest Legacy areas. They are as follows: 1) Southern Mountains, 2) Northern Mountains, 3) Southern Piedmont, 4) Northern Piedmont, and 5) Coastal Plain. These areas are analogous to the U.S. Forest Service Forest Inventory Analysis Areas (FIA). These areas will encompass the entire state but have different goals based on the *Virginia Forest Resource Assessment*, the focussed public input process with recommendations, and Forest Legacy subcommittee input. The main goal for all areas will be to lessen conversion to non-

Figure 12



forest use. Figure 12 shows these five areas in Virginia. The following is a summary of the four primary goals for each designated Forest Legacy area:

Southern Mountains
- lessen conversion to non-forest use
- water quality protection
- habitat protection
- conserve forest lands for wood product opportunities

Northern Mountains
- lessen conversion to non-forest use
- water quality protection
- preserve forest-based recreation opportunities
- protect riparian corridors

Southern Piedmont
- lessen conversion to non-forest use
- conserve forest lands for wood product opportunities
- habitat protection
- protect natural beauty

Northern Piedmont
- lessen conversion to non-forest use
- habitat protection
- protect riparian corridors
- protect scenic vistas

Coastal Plain
- lessen conversion to non-forest use
- conserve lands for wood product opportunities
- habitat protection
- water quality protection

ELIGIBILITY CRITERIA FOR FOREST LEGACY AREAS

The public input process was used to determine specific goals for each of the 5 Forest Legacy areas. Evaluation of differing parcels of land for this program will be both quantitative and qualitative. The quantitative portion will be a weighted point system as promoted by the Forest Legacy subcommittee and the public input process. The qualitative portion will constitute several initial questions to document program appropriateness and any final comments to distinguish indefinable attributes.

The following are the eligibility criteria for lands to be considered for Forest Legacy Areas:

- Threatened by conversion to non-forest use
- Conserve timber production capabilities
- Habitat for threatened and endangered species
- Serve as a buffer for riparian protection
- Preserve historic and cultural resources
- Encourage preservation of scenic vistas

In addition, each Forest Legacy Area has value both as distinctive socially or ecologically (for example, habitat for threatened or endangered species, have multiple resources values, threatened by conversion and support regional public values). Specific regional values were identified in the public participation process and are listed within each specific Forest Legacy Area.

Each tract within a Forest Legacy Area will contain the following:

- The landowner(s) must be a "willing seller"
- The tract of land must be at least 20 acres in size
- The tract of land must have a Stewardship Plan or multiple resource plan for the property
- The tract must have a minimum threshold percentage forest acreage of 80%
- The title to the land must be free and clear of any liens and/or encumbrances
- The landowner(s) must be willing to participate in a perpetual easement that allows annual monitoring
- The Regional Forest Legacy Monitoring Team must have access to the tract for evaluation

DETAILED FOREST LEGACY AREA DESCRIPTION

Please refer to Figure 12 for the location of the five Forest Legacy areas. The following is a compilation of information for each Legacy area. Following each description is information about the status of the forests and forest industry in each area.

Southern Mountains

This area extends from the southwestern tip of Virginia north and west and encompasses the counties of Lee, Wise, Dickenson, Buchanan, Tazewell, Russell, Scott, Washington, Smyth, Wythe, Bland, Giles, Montgomery, Pulaski, Grayson Carroll and Floyd.

The southern mountains are characterized by unique geologic features and habitats yielding many threatened and endangered species. In addition, this area has a depressed economy with a low cost of development rights. Additionally, there is a high need for proper timber management.

Specific values to be protected through the Forest Legacy Program were identified at the public meeting held in Abingdon. These values include biodiversity and water quality and large areas of already protected land. Threats to conversion of forests to non-forest uses in the Southern Mountains Forest Legacy Area were identified as the selling of land due to the depressed economy and an increasing population in the area.

Threats to conversion include expansion of the metropolitan areas of Wytheville and Abingdon along Interstate 81 and around Blacksburg, the location of Virginia Tech. Most notable is the location of the nations first "smart road" extending from I-81 near Christiansburg to Blacksburg.

From 1986-92 in the SOUTHERN MOUNTAINS of Virginia:

- *area of timberland remained stable at 3.0 million acres*
- *area of timberland held by non-industrial private forest (NIPF) landowners remained stable at 2.5 million acres*
- *are of timberland classified as a hardwood forest type remained stable at 2.5 million acres*
- *more than 27,000 acres were harvested annually and retained in timberland*
- *artificial and natural regeneration declined 10 percent from 19,000 to 17,000 acre annually*
- *average basal area of live trees 5. 0 inches d.b.h. and larger remained stable at 87 square feet per acre*
- *volume of hardwood growing stock increased by 5 percent from 4.5 to 4.8 billion cubic feet*
- *Volume of softwood growing stock declined by 4 percent from 640 to 617 million cubic feet*
- *Net annual growth of hardwood growing stock declined by 26 percent from 133 to 99 million cubic feet*
- *Annual removals of hardwood growing stock were 2.4 times removals between 1977 and 1986, and now total 61 million cubic feet*
- *Annual mortality of hardwood growing stock increased 38 percent from 26 to 36 million cubic feet*

Northern Mountains

This area extends from just southwest of Roanoke extending Northwest up the Shenandoah Valley to the state of Maryland and encompasses the counties of Craig, Allegheny, Bath, Highland, Rockingham, Shenandoah, Frederick, Roanoke, Botetourt, Rockbridge, Augusta, Page, Warren, and Clarke Counties.

The northern mountains are characterized by higher populations than the southern mountains and a higher percentage of permanently conserved land in the George Washington and Jefferson National Forests and Shenandoah National Park.

Specific values to be protected through the Forest Legacy Program were identified at the public meetings held in Roanoke/Salem and Harrisonburg. These values include productive forests, large areas of protected land, and the headwaters of the Chesapeake Bay. Threats to conversion were identified as increasing development and population pressures, and forest fragmentation.

Threats to conversion are similar to the Southern Mountains in that growth is occurring along the I-81 corridor in and around the cities of Winchester, Harrisonburg, Staunton, and Roanoke. Additionally, this area possesses a vibrant agricultural products industry, particularly poultry and eggs and beef cattle.

From 1986-92 in the NORTHERN MOUNTAINS of Virginia:

- *Area of timberland declined by 18,000 acres, or less than 1 percent*
- *Area of timberland owned by nonindustrial private forest (NIPF) landowners increased more than 27,000 acres, or by 2 percent*

- *Area of timberland classified as a hardwood forest type declined 102,000 acres, or by 5 percent*
- *Nearly 10,000 acre were harvested annually and retained in timberland*
- *The annual rate of stand regeneration by both natural and artificial means increased 11 percent from 9,000 to 10,000 acres per year*
- *Average basal area of live trees 5.0 inches d.b.h and larger increased 2 percent from 83 to 85 square feet per acre*
- *Volume of hardwood growing stock increased more than 7 percent from 3.3 to 3.6 billion cubic feet*
- *Volume of softwood growing stock increased nearly 8 percent from 658 to 710 million cubic feet*
- *Net annual growth of hardwood growing stock declined more than 6 percent from 76 to 71 million cubic feet*
- *Annual removals of hardwood growing stock increased 50 percent from 20 to 30 million cubic feet*
- *Annual mortality of hardwood growing stock increased almost 25 percent from 20 to 25 million cubic feet*

Southern Piedmont

This area extends from the North Carolina state line northward through the southern middle portion of Virginia and contains the counties of Patrick, Henry, Franklin, Bedford, Campbell, Appomattox, Pittsylvania, Halifax, Charlotte, Prince Edward, Cumberland, Powhatan, Amelia, Nottoway, Lunenburg, and Mecklenburg.

The southern Piedmont area is characterized by strong growth in the cities of Lynchburg, Danville, and South Boston while maintaining a strong forest industry land base in the northern and eastern part of the area. This area has a high potential for obtaining larger parcels for conservation purposes at lower costs.

Specific values to be protected through the Forest Legacy Program were identified at the public meeting held in Farmville. These values include important forest species, larger blocks of productive forest, and a vibrant forest products industry. Threats to conversion were identified as the loss of the family farm due to development pressure and expanding industrial growth around cities.

Threats to conversion include expanding industrial growth around the above mentioned cities and growth from Richmond to the southwest.

From 1986-92 in the SOUTHERN PIEDMONT of Virginia:

- *area of timberland remained stable at 3.8 million acres*
- *area of timberland controlled by nonindustrial private forest (NIPF) landowners increased by 109,000 acres, or nearly 4 percent*
- *Area of timberland classified as a hardwood forest type declined nearly 59,000 acres, or almost 3 percent*
- *More than 61,000 acres were harvested annually and retained in timberland*
- *Artificial and natural regeneration increased nearly 22 percent from an average of 57,000 to 70,000 acres annually*
- *Average basal area of live tree 5.0 inches d.b.h. and larger increased from 70 to 73 square feet per acre.*
- *Volume of hardwood growing stock increased 8 percent from 3.8 to 4.1 billion cubic feet*
- *Volume of softwood growing stock increased more than 10 percent from 1.7 to 1.9 billion cubic feet*
- *Net annual growth of hardwood growing stock increased more than 5 percent from 134 to 141 million cubic feet*
- *Annual removals of hardwood growing stock increased 9 percent from 82 to 90 million cubic feet*
- *Annual mortality of hardwood growing stock increased 36 percent from 14 to 19 million cubic feet*

Northern Piedmont

This area extends from the central portion of Virginia northward to the Maryland state line and lying east of the northern mountains and encompassing the counties of Amherst, Nelson, Albemarle, Greene, Madison, Rappahannock, Fauquier, Loudoun, Prince William, Fairfax, Stafford, Culpepper, Orange, Louisa, Fluvanna, Goochland and Spotsylvania.

The northern Piedmont is characterized by high population in many areas. Numerous historical sites and a large proportion of urban forests. A strong land conservation ethic exists in this area including the "Green Springs" National Historic District in Louisa county.

Specific values to be protected through the Forest Legacy Program were identified at the public meeting held in Warrenton. These values include unique forest areas along the Blue Ridge mountains, historical sites, and wildland/urban interface forests. Threats to conversion were identified as intense population growth and commercial development activity

From 1986-92 in the NORTHERN PIEDMONT of Virginia:

- *Area of timberland decreased by 38,000 acres, or by over 1 percent*
- *Area of timberland held by nonindustrial private forest (NIPF) landowners remained stable at 2.1 million acres*
- *Area of timberland classified as a hardwood forest type declined by over 61,000 acres, or by more than 3 percent*
- *More than 17,000 acres were harvested annually and retained in timberland*
- *Artificial and natural regeneration declined 9 percent from an average of 22,000 to 20,000 acres annually*
- *Average basal area of live trees 5.0 inches d.b.h. and larger increased from 79 to 85 square feet per acre*
- *Volume of hardwood growing stock increased 10 percent from 3.3 to 3.7 billion cubic feet*
- *Volume of softwood growing stock increased by 6 percent from 877 to 930 million cubic feet*
- *Net annual growth of hardwood growing stock declined by more than 5 percent from 98 to 93 million cubic feet*
- *Annual removals of hardwood growing stock at 40 million cubic feet, about the same level as in the previous period*
- *Annual mortality of hardwood growing stock increased 49 percent from 14 to 21 million cubic feet*

Coastal Plain

This area extends east of the "fall line" from North Carolina north and east to the Eastern Shore and encompassing the counties of Brunswick, Greensville, Dinwiddie, Chesterfield, Henrico, Hanover, Caroline, King George, Westmoreland, Richmond, Essex, King and Queen, King William, New Kent, Charles City, Prince George, Sussex, Southampton, Isle of Wight, Surry, James City, Gloucester, Middlesex, Lancaster, Northumberland, Mathews, Accomack, Northampton and the cities of Virginia Beach, Chesapeake and Suffolk.

This area is characterized by a wide variation in population pressures from very high around Richmond to lower pressure south of the James River where a viable forest products industry exists. The Chesapeake Bay influences this area directly by providing both a seafood industry and ecotourism opportunities.

Specific values to be protected through the Forest Legacy Program were identified at the public meetings held in Warsaw and Virginia Beach. These values include protection of the Chesapeake Bay, large forest industry holdings, and unique river systems. Threats to conversion were identified as the Golden Crescent (Washington to Richmond to Virginia Beach) expansion, population pressures from retirement communities, and loss of productive forest products naval shipyard industries.

Threats to conversion include a significant "second home" development pressure and growth around Richmond, Newport News, and Virginia Beach. A strong military presence still exists in this area with the Naval Shipyard. Growth also threatens the Eastern Shore through vacation home construction and an expanding agricultural economy.

From 1986-92 in the COASTAL PLAIN of Virginia:

- *Area of timberland decreased by 72,000 acres, or by 2 percent*
- *Area of timberland held by nonindustrial private forest (NIPF) landowners increased by 24,000 acres, or by less than 1 percent*
- *Area of timberland classified as a pine type increased by 4 percent to over 1.3 million acres*
- *Over 70,000 acres were harvested annually and retained in timberland*
- *The annual rate of stand regeneration increased from 65,000 acres to nearly 84,000 acres per year, or by 28 percent*
- *Average basal area of live trees 5.0 inches d.b.h. and larger has increased from 75 to 78 square feet per acre*
- *Volume of softwood growing stock increased from 2.4 to 2.5 billion cubic feet, or by 5 percent*
- *Volume of hardwood growing stock remained at about the same level as in the previous survey at 3.7 billion cubic feet*
- *Net annual growth of softwood growing stock increased from 101 to over 136 million cubic feet, or by 35 percent*
- *Annual removals of hardwood growing stock increased to 125 million cubic feet, a gain of 19 percent*
- *Annual mortality of softwood growing stock averaged 19 million cubic feet*

APPENDIX A

Application Package

COMMONWEALTH OF VIRGINIA

FOREST LEGACY PROGRAM

Application – Information Sheet

Nationwide, the traditional uses of private forest lands for such activities as timber and wood product management, wildlife management and recreational use have declined at an alarming rate. The primary reasons for this decline have been the conversion of forested tracts to non-forest uses (such as residential or commercial development), and from forest fragmentation (the breaking up of large forests into smaller tracts separated by non-forested lands). These dramatic changes have had far reaching impacts beyond the loss of our forests, including decreased water quality and quantity, decreased wildlife and habitat diversity, loss of recreational opportunities, and the loss of scenic vistas and historic resources. Virginia is suffering these losses also.

Public lands are increasingly relied upon to provide these resources and opportunities, but alone cannot possibly meet this demand. To help maintain the integrity and traditional uses of our "working forests", Congress created the Forest Legacy Program which allows the U. S. Department of Agriculture, through the Forest Service, in cooperation with state agencies, to acquire land or interest in land. All acquisitions are purchased at fair market value as determined by standardized government appraisal methods, and are held by the Commonwealth of Virginia in perpetuity. The Forest Legacy Program relies on the concept of a "willing seller, willing buyer and no condemnation."

For more information or assistance in filling out an application, please contact the Forest Legacy Program at the Virginia Department of Forestry at (804) 977-6555.

FOR OFFICE USE ONLY

Application Number: _____

Date: _____

COMMONWEALTH OF VIRGINIA

FOREST LEGACY PROGRAM

Landowner Inspection Consent Agreement

I, _____ as the landowner or the landowner's authorized agent (proof of authorization must accompany this document) agree to allow inspection, appraisal and survey of my property being offered for consideration under the Forest Legacy Program. I agree to allow members of the Virginia Department of Forestry or the Virginia Forest Legacy Committee or their designated staff to inspect the property as may be required at any time. I shall be notified in advance of all inspection visits.

_____ _____

Signature of Landowner or Agent Date

_____ _____

Virginia Department of Forestry Date

_____

Title

FOR OFFICE USE ONLY

Received by: _____ Application Number _____

Date: _____

APPLICANT INFORMATION:

Landowner's Name: _____

Mailing Address: _____

_____

Daytime Telephone Number: _____

Landowner's Agent: _____

Mailing Address: _____

Daytime Telephone Number: _____

Virginia House District: _____

Virginia Senatorial District: _____

PROPERTY INFORMATION:

Legal Description:

County: _____ Tax Map # _____

Assessor's Plat and Lot Numbers: _____

Deed Reference (Book and Page Number): _____

Current Local Zoning Where Property Is Located:

(Include minimum lot size and road frontage requirements):

_____

_____

Current tax valuation or recent appraisal (attach if available)

_____

Property's Total Forested Acres _____

Forested Acres of Tract Offered for Forest Legacy: _____

Acres of Cleared/Open Land: _____

TIER 1 EVALUATION

Landowner Goals and Objectives

Describe your long term goals and objectives for this parcel:

_____

_____

_____

_____

Traditional Forest Values

What is/are the "traditional use(s) of this forest land?

_____

_____

_____

_____

Landowner Comments

In your opinion, is there a "threat of conversion to non-forest use" of the parcel proposed for enrollment in the Forest Legacy Program? Be specific:

_____

_____

_____

_____

Do you currently have a Forest Stewardship or other Forest Management Plan? Yes ❑ No ❑

If so, please provide a copy.

TIER 1 EVALUATION

CONFIDENTIAL

The following information shall remain strictly confidential until such time as: 1) the application is approved and all financial transactions are concluded; or 2) all titleholders give written permission to release the information.

FINANCIAL INFORMATION

State your opinion on the value of the interests to be enrolled in the Forest Legacy Program, and the method used to determine that value (appraisal, landowner estimate, etc.)

_____

_____

_____

What is/are the estimated sale price(s) of the interests being offered?

_____

_____

_____

State the value of the landowner(s) contribution, if any, either in donated value of in-kind services or financial.

_____

_____

_____

LIENS AND ENCUMBRANCES

List any and all liens and encumbrances on the property proposed for enrollment in the Forest Legacy Program. Examples: utility easements, public rights of way, water flow or use restrictions, septic systems or water easements, deed restrictions, tax liens, etc.

The information provided above is true to the best of my/our knowledge and belief.

ALL TITLEHOLDERS MUST SIGN.

PRINT NAME(S)	***SIGNATURE***	***DATE***
_____	_____	_____
_____	_____	_____

Note: All property accepted into the Forest Legacy Program are based on appraisal values meeting federal standards.

TIER 1 EVALUATION

FOR OFFICE USE ONLY

Application Number: _____Date:_____

FOREST LEGACY PROGRAM CHECKLIST

With your Forest Legacy Program application package, please submit four (one original and three copies) of the following for each contiguous parcel

- ❑ Completed Application
- ❑ Name(s) and Address(s) of other owner(s) of record for this tract
- ❑ Signed Consent Agreement
- ❑ Copy of Road Map Indicating Location of the Property
- ❑ Copy of Plat or Survey map of the Parcel
- ❑ Aerial Photo (can be obtained through your local Farm Services Agency office)
- ❑ Legal Description (if available)
- ❑ List of Existing Permanent Improvements on the Tract, including houses, barns, lakes, ponds, dams, wells, roads and other structures, and the total number of acres occupied by improvements.
- ❑ Map identifying all dams, dumps, or waste disposal sites on the property
- ❑ Forest Management Plan (if available)

NOTE: All materials become the property of the Commonwealth of Virginia and are non-returnable.

DISCLOSURE OF THIS INFORMATION IS VOLUNTARY; HOWEVER, FAILURE TO COMPLY MAY RESULT IN THIS FORM NOT BEING PROCESSED.

TIER 2 EVALUATION

Virginia Forest Legacy Area Evaluation Checklist

Area:	Acres:
Location:	
1. Threatened by Conversion to Non-Forest (Total 19 pts.)	
a. Type of Threat	***Tract Scoring***
Danger of conversion in less than 5 years (0-8 pts.)	
Wooded, but risk of becoming further fragmented (0-5 pts.)	
Percent of county in non-rural forest [1] 0-10% (1pt.)	
10-15% (2 pts.)	
15-20% (3 pts.)	
>20% (4 pts.)	
Adjacent to conserved forest (2 pts.)	
SUBTOTAL	
b. Factors Affecting Acquireablity (yes or no)	
Owned by willing seller(s)	
Owner(s) understands less-than-fee-acquisition	
25% match available (county/state/land trust)	
May be available at below FMV (bargain)	
Able to be "bundled" with adjacent properties	
2. Contains one or more public values (Total 50 pts.)	
a. Scenic Resource	***Tract Scoring***
Locally important, panoramic views (0-2 pts.)	
Along designated scenic road (0-2 pts.)	
b. Riparian / Hydrologic Resources	
On 303(d) list as "impacted" (3 pts.)	
Extensive (over 300') river shoreline (0-2 pts.)	
Flood plain/natural valley (groundwater storage/recharge (0-1 pt.)	
Contributes to drinking water supply (0-3 pts.)	
Wetlands (0-3 pts.)	
SUBTOTAL	
c. Fish and Wildlife Habitat[2] (Total 14 pts.)	***Tract Scoring***
Outstanding habitat for one or more species that include:	
Forest interior nesting birds (0-2 pts.)	
Significant populations of resident species (0-2 pts.)	
Neo-tropical migrant species (0-2 pts.)	
Nesting/feeding areas for migratory species (0-2 pts.)	
Forest inhabiting mammals/reptiles/amphibian/invertebrates (0-2 pts.)	
Connective habitats; corridors/linkages/reduced biological isolation (0-4 pts.)	
SUBTOTAL	

d. Known Threatened & Endangered Species (Total 6 pts.)	***Tract Scoring***
Plant/animal species on Virginia state list as E, T or Sp. Concern (3 pts.)	
Federally listed plant/animal species (2 pts.)	
Connective habitats; corridors/linkages/reduced biological isolation (0-1 pts.)	
SUBTOTAL	
e. Known Cultural Resources (Total 3 pts.)	***Tract Scoring***
Recorded archeological site (0-1 pts.)	
Historic Features (0-2 pts.)	
SUBTOTAL	
f. Productive Soils (US-SCS Technical Guide) (Total 3pts)	***Tract Scoring***
Productive Ag. Soils (0-1 pts)	
Productive forest soils (0-2 pts)	
SUBTOTAL	
g. Other Ecological Values (Total 8 pts.)	***Tract Scoring***
Provides a complex of ecological communities (bio-diversity) (0-3 pts.)	
Includes mixing area of ecological communities (0-2 pts.)	
Has old-growth forest (0-1 pts.)	
Provides immediate watershed/water supply protection (0-2 pts.)	
SUBTOTAL	
3. Provide for Traditional Forest Uses (Total 12 pts)	
	Tract Scoring
Continued timber management under Stewardship Plan (0-6 pts.)	
Continued watershed/water filtration role (0-4 pts.)	
Continued outdoor recreation opportunity (0-2 pts.)	
SUBTOTAL	
4. Regional Value (Total 9 pts.)	
	Tract Scoring
Linkages for recreation, especially connecting public lands (0-3 pts.)	
Public/private drinking water supply protection (0-3 pts.)	
Traditional scenic qualities (0-3 pts.)	
SUBTOTAL	
5. Other Program Considerations (Total 9 pts.)	
	Tract Scoring
Public Visibility (0-3 pts.)	
Public Support (0-2 pts.)	
First Year Cost (0-2 pts.)	
Five Year Cost (0-2 pts.)	
SUBTOTAL	

[1] Virginia Forest Resource Assessment Project, 1996

[2] To be completed by Virginia Department of Game and Inland Fisheries as a member of Regional Evaluation Team

APPENDIX B

Authorization Documents

USDA

United States Department of Agriculture

Office of the Secretary
Washington, D.C. 20250

JAN 16 2001

The Honorable John Gilmore
Governor of Virginia
Richmond, Virginia 23219

Dear Governor Gilmore:

I am writing in response to the October 13, 2000, transmittal of the Assessment of Need (AON) document and request to join the Forest Legacy Program from Ms. Elizabeth Estill, Regional Forester, U.S. Forest Service. Pursuant to my authority under section 7 of the Cooperative Forestry Assistance Act of 1978 (16 USC 2103c), as amended, I have reviewed the Virginia AON and am pleased to welcome your State into the Forest Legacy Program.

The AON identified the following goal for the Forest Legacy Program in Virginia:

- Virginia's Forest Legacy will help to conserve Virginia's forest for future generations.
- Conservation easements will be the prime tool used to achieve this goal.

Five Forest Legacy Areas (FLA) meeting eligibility criteria to achieve this goal and having public support were proposed. All 5 areas are described and mapped in the designated Virginia AON, and all five are hereby instituted as approved FLA's.

The staff of the Virginia Department of Forestry with the personal leadership of Mike Foreman, Jim Garner, and Bettina Ring, has worked diligently to bring Virginia into the Forest Legacy Program. Please thank them on my behalf.

Thank you again for your efforts to join the Forest Legacy Program. If I can be of further assistance, please do not hesitate to contact me.

Sincerely,

DAN GLICKMAN
Secretary

JAMES W. GARNER
State Forester

COMMONWEALTH of VIRGINIA

DEPARTMENT OF FORESTRY

Fontaine Research Park
900 Natural Resources Drive
Post Office Box 3758
Charlottesville, Virginia 22903-0758

804-977-6555 (V/TDD)
FAX 804-296-2369

December 15, 1999

Memorandum

To: The File

From: James W. Garner, State Forester

Subject: Establishment of Forest Legacy subcommittee

The purpose of this memo is to establish a Forest Legacy subcommittee as a part of the full State Forester Stewardship Committee. This Forest Legacy subcommittee will guide the Assessment of Need process including the public participation portion. I am adding several individuals to this Forest Legacy subcommittee to ensure adequate participation.

This smaller Forest Legacy subcommittee will work directly with Department of Forestry staff to oversee completion of the Assessment of Need by September 15, 2000.

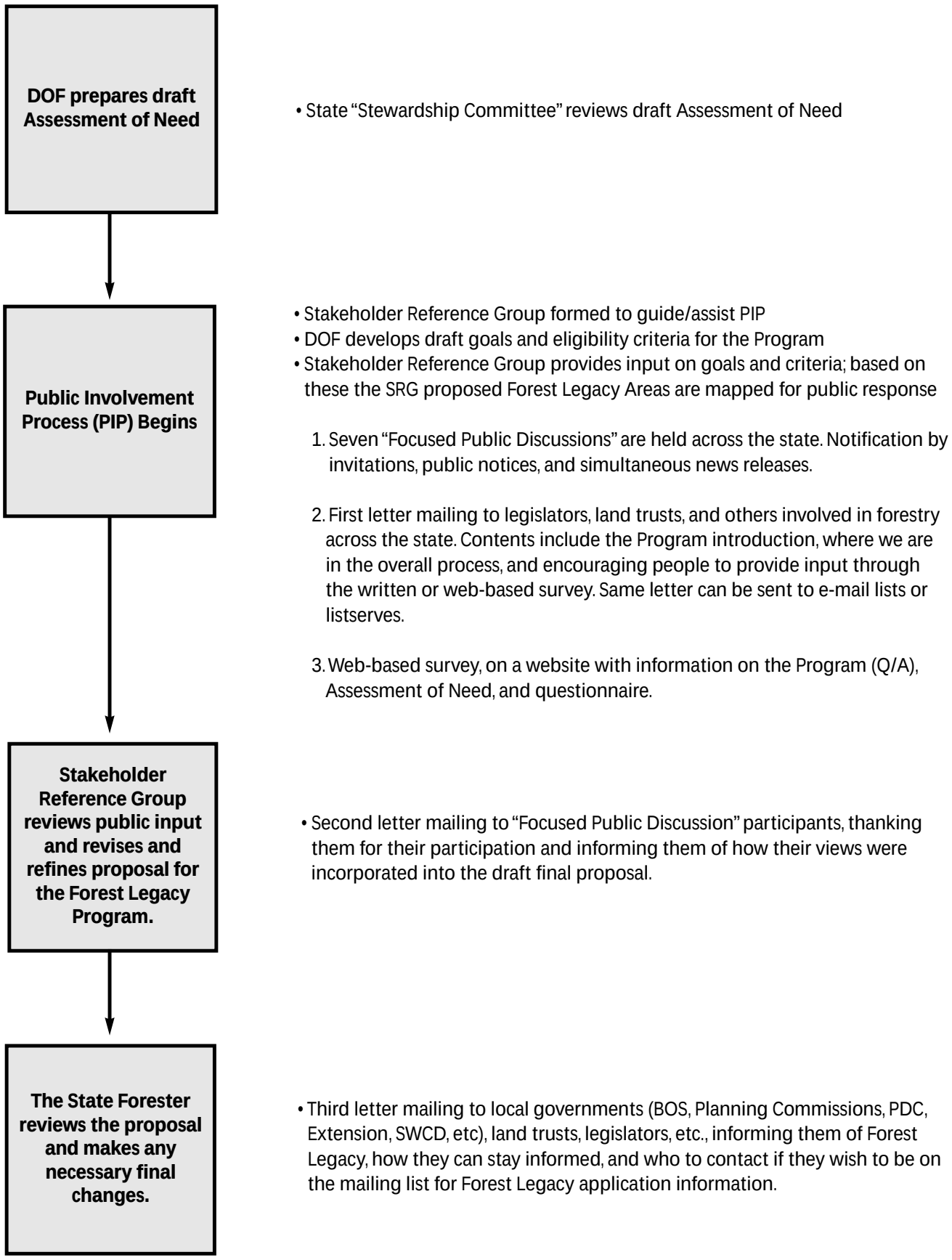
Please contact this office with any questions or comments regarding the contents of this memorandum.

C: J. Michael Foreman, Forest Management Team

APPENDIX C

Public Involvement Process

Forest Legacy Program Public Input Process



AREAS OF AGREEMENT

It is significant to note that 109 meeting participants, representing a broad range of interests in seven different regions of the state, often shared similar visions and concerns for the Virginia Forest Legacy program. Below, the areas of general agreement among participants are outlined, along with specific recommendations by the Stakeholder Reference Committee that are drawn from or based on these areas of agreement.

VIRGINIA AS A DECISION-MAKER FOR VIRGINIA FOREST LEGACY

Many participants voiced skepticism about the development of another federal program and were particularly concerned that the Federal government might decide, now or in the future, that it wishes to control the program at the state level. These participants expressed sentiments that the program would fail to meet Virginia's real forest conservation needs if Virginia is not allowed to control how Forest Legacy funds are spent. Many participants felt that Virginia should think twice about participating in Forest Legacy if this scenario arises.

Additionally, many participants were extremely wary of assurances that Virginia would be able to control how the Virginia Forest Legacy program developed. Many cited instances of federal code that allows for certain kinds of management practices in national forests, but which has been "overridden" in practice by changing federal policy that no longer allows such management practices. While timbering, or active forest management, may be allowed by federal code to occur in Forest Legacy properties, the concern was repeatedly voiced that federal policy might change on this issue, or on any other issue.

Overall, while there was great enthusiasm about the potential of the Forest Legacy program and partnering with the Federal Government there was concern that the program would be altered over time .

The Stakeholder Reference Committee recognized these concerns, but also recognized that an easement, once drawn up and signed, is a legally binding document that would not be affected by changing federal policy. It also noted that Federal Regulations for Threatened and Endangered Species would need to be upheld on any property, regardless of the existence of an easement. However, to emphasize that Virginia should be able to set its own priorities, the Committee adopted the following recommendation:

Consistent with federal guidelines, Virginia will make recommendations for the funding of priority easements based on its own statewide priorities.

Goal for Virginia's Forest Legacy Program

The goal below was crafted by the Stakeholder Reference Committee for response from participants in the seven regional "Focussed Public Discussions." The predominant view among participants was that this goal is both valid and sufficiently precise for the purposes of the program. In one group, a number of people favored the U.S. Forest Service Forest Legacy goal as they felt that the draft Virginia goal was too vague and not sufficiently informative about what it intended to accomplish. Others felt that the goal should reflect all potential tools that may be used, such as purchase of property, even though such tools may be used infrequently. Generally, however, people felt that the program goal should be visionary in

nature and worded broadly to allow for changes through time.

The Stakeholder Reference Committee considered these issues and decided to make no changes to the proposed program goal.

The following goal is recommended for the Virginia Forest Legacy Program:

> **Virginia Forest Legacy will help to conserve Virginia's forests for future generations. Conservation easements will be the prime tool used to achieve this goal.**

Designation of Entire State as A Forest Legacy Area

A central issue discussed at all seven meetings was where the Forest Legacy funding should be focused. Should discreet areas within Virginia be designated "Forest Legacy Areas" to focus the limited funds available, or should the entire state be designated "Forest Legacy Areas" so that all areas of the state are eligible for Forest Legacy assistance?

The Stakeholder Reference Committee first considered this question and reached consensus on the proposal that the entire state should be designated a Forest Legacy Area, while giving lower priority consideration to the highly urbanized areas as determined by the latest population Census. Significantly, each of the seven public meetings reached the same conclusion, and felt strongly that Virginia would be best served by a designation of the entire state. Their reasoning was that Virginia is richly forested with significant forests in virtually every region. At the same time, threats of conversion to non-forest uses are also present in varying degrees throughout the entire state. As a consequence, most participants felt strongly that it would be unfair to designate one area of the state at the expense of others. Only two or three people, out of all 109 participants, felt that the Forest Legacy program should be focussed in discreet areas of the state, and even these few felt such a focus should be only on a temporary basis until greater funding is received.

Lower Priority Given To Urban or Western Areas: There was no clear consensus about the Stakeholder Reference Committee's suggestion that urban areas be given lower priority than other parts of the state. Several groups strongly agreed with this proposal that the limited Forest Legacy funds should be spent in the most cost-effective manner possible and conservation easements in urban areas would be less cost-effective. Others, however, felt that there could be opportunities to save significant threatened forests in urban areas and that some of these forests could be worth the extra expense because of the significance of that forest to greater numbers of people.

It is interesting to note that three of the seven groups also strongly questioned the desirability of spending Forest Legacy funds in the western portion of the state. They reasoned that huge tracts of forests have already been successfully preserved in national forests, and that therefore the need for preservation is less in that region. They stressed that other areas of the state, particularly Southside and eastern portions of the state, have a much greater need for Forest Legacy assistance because there are fewer forested areas already preserved and population pressures threaten to eliminate those that remain. While they did not want to exclude the western portion of the state, they felt that it should receive a lower priority in Forest Legacy assistance.

The Stakeholder Reference Committee considered these issues at some length. The Committee agreed that one of the key goals of

Forest Legacy is for its forests to be sustainable over time. This also echoes the preference of participants in the regional meetings for sustainability as a key criterion for acceptance into the program (*See Responses from Public Feedback Questionnaires.*) Specific concern was expressed about the need to avoid purchase of easements of "central city tracts" that would not be sustainable through the centuries ahead. Another concern was that Forest Legacy should aim for adjoining properties in the program to have similar management goals. Overall, the Committee agreed that the same criteria should be applied equally to all applicants, and that no regions should be given automatic lower priority than others.

With regard to designation of the Forest Legacy Areas, the Committee decided that the entire state should be eligible for Forest Legacy. The experience of other states was shared with the Committee, particularly South Carolina, which has divided the entire state into "Focus Areas" with distinct goals for each Area. Dividing the Commonwealth into Forest Legacy Areas will allow the State Forest Stewardship Committee to better address specific conservation goals by ecological need. For the state, the benefit of using sub-regions is to enable more specific goals that reflect the differing needs of each region. The Committee felt that regional goals would be useful to give added focus to the program, and that many of these goals could be drawn from the comments of participants in the regional meetings. However, Committee members noted that differing regional goals would not impact the evaluation of individual tracts of land, which would still be conducted with uniform criteria for all sub-regions.

The Stakeholder Reference Committee adopted the following consensus recommendations:

It is recommended that the Commonwealth be subdivided into sub-regions according to ecosystems, (e.g. Piedmont, Coastal Plain, etc.). All sub-regions would be designated Forest Legacy Areas, so that the entire Commonwealth should be covered by the Forest Legacy program. Goals should be set for each of these sub-regions.

Timing of Applications

There was clear consensus among participants that it would be preferable for Forest Legacy applications to be accepted and reviewed once per year. This system would enable tracts of land to be assessed in comparison to each other, so that relative decisions can be made.

It is recommended that applications be reviewed for a defined period, once each year.

Framework for Assessment

Perhaps more importantly, there was complete consensus among participants that applications should be assessed individually on their own merits, using weighted criteria. This also follows the model that has been adopted by other states.

The Stakeholder Reference Committee discussed at some length how other states assess properties and submit packages to the U.S. Forest Service for approval. Some states submit a package of adjoining properties that are "bundled" together. Some states submit packages in which several phases of implementation are created, so that Phase I would be implemented with the smallest amount of funding, Phase II implemented with greater funding, and Phase III implemented with complete funding. This streamlines the approval process and provides greater flexibility to the state should one property fall through. Some states are more proactive in targeting specific areas for protection and then approaching landowners to see if a package can be assembled. Landowner notification, but not pre-approval, is required by the U.S. Forest Service in this scenario. Also, one state uses a system where proponents for each tract of land are asked to appear before the decision-making body to make a "case" for each property; this facilitates a richer appreciation and understanding of each property.

The current system of funding was clarified by the U.S. Forest Service Representative. In the last Fiscal Year, half of the federal funds were divided in equal shares among all states based on the number of active states. The remaining half were allocated on a competitive basis among the states, with the best state "packages" receiving funding. There are discus-

sions currently underway between the National Association of State Foresters and the U.S. Forest Service that will determine how program funds will be allocated in the next Fiscal Year. Some parties feel that the current system should continue while others feel strongly that all funds should be allocated equally among the states.

After consideration of all these factors, the Stakeholder Reference Committee adopted the following consensus recommendations:

> ***A set of minimum qualifications should be established for a property to be considered by Forest Legacy, such as willingness to sell or donate development rights, a minimum parcel size, a minimum percentage forested, a general warranty of title, and a statement of purpose for entry into the Forest Legacy program.***
>
> ***Having met the minimum qualifications, applications be assessed individually on their own merits, using a weighted point system. One of these criteria should be established for "bundled" properties .***

Regional and State-Level Evaluation

One question that was raised in several groups was the mechanism for how the properties would be assessed. Who would actually do the evaluation for each property? Should the same people evaluate all properties, or should regional people knowledgeable about the locality assess properties in their region? Several interesting options emerged from the seven meetings.

Option A: Two-Tiered Evaluation By Regional And State-Level Committees

This concept emerged from the very first meeting and was offered as an option for consideration at all subsequent meetings, with the exception of Harrisonburg where a fire-drill shortened the discussion period. This concept envisions a two-tiered review for every application. The first review would be accomplished by regional staff of all the key potential conservation easement organizations.

Membership for this regional committee might be constituted as follows:

- (1) Department of Forestry
- (1) Department of Game and Inland Fisheries
- (1) Virginia Outdoors Foundation
- (1) Soil and Water Conservation District
- (1) Local Government
- (1) Local Land Trust
- (2) Stewardship Landowners

The purpose of the regional review would be two-fold: (1) to evaluate the tract using the weighted point system of criteria, and (2) to facilitate coordination among the potential easement holders, so that the most cost-effective and beneficial easement "package" can be assembled. It is possible that this regional review could be accomplished with or without actual committee meetings, as committee members might be able to individually complete the evaluation forms and submit their individual ideas for possible easement "package" options, although this level of detail was not discussed during the meetings. It is important to note that participants felt strongly that actual decision-making should not occur at the regional level, only evaluation of the property according to criteria.

The second review would be accomplished by a State-Level Committee, such as the Stewardship Committee. This Committee would also need to have representation from all potential conservation easement holders and stewardship landowners. The State-level Committee would review the regional evaluations and proposals for easement "packages," and would make final assessments and decisions based on a broader state-wide view.

Based on the comments made throughout the seven meetings, this model offers the advantage of drawing on local knowledge of the property. It also brings together for the first time all the potential conservation easement holders to engage in collaborative discussions about how available funds from different sources can be best leveraged to achieve a conservation goal. The need for collaboration and coordination between conservation holding agencies was a very strong message heard throughout the seven meetings.

Option B: State-Level Committee
This model is essentially the same as Option A, except that there would be no regional review and coordination. Each property would be individually reviewed by members of the State-Level Committee, or their staff, and then an overall comparative assessment of the proposals would occur by members of the Committee. Coordination of potential easement "packages" would occur at this level of discussion, rather than occurring initially at the regional level.

This model offers a clear benefit of a simpler program structure, but has the potential disadvantage of not engaging regional knowledge and coordination in the evaluation process.

Option C: Independent State-Level Committee
One group felt strongly that another model altogether should be considered. In their view, decisions about which lands should be preserved through Forest Legacy would be best made by an independent state-level Board. This Board would be staffed by the Department of Forestry, which would serve in an advisory role along with other appropriate state agencies. Membership on the Committee would consist of non-governmental land trust and conservation organizations and stewardship landowners, reflecting the geographic diversity of the state.

This model offers the potential benefit of decisions being made "by the people for the people," as conceived by this group. It also has the potential disadvantage of becoming a body that reflects the politics du jour, rather than long-term goals which are more the domain of state agencies.

The Stakeholder Reference Committee of the State Forest Stewardship Coordinating Committee considered all of the above options and quickly reached consensus that Option One offered the most potential. Members were excited about the possibility of creating a mechanism for improving coordination among organizations that hold easements. The U.S. Forest Service representative noted that the idea of a regional coordination and evaluation was new and innovative.

A two-tiered system of evaluation should be developed. Individual property applications should be evaluated first at the regional level, and coordination of possible easement packages or leveraging discussed at this level. A comparative assessment of all applications should then be conducted at the state level by a Stakeholder Committee.

Who Holds the Easement
The overriding sense of participants was that the decision of who should hold the easement should remain flexible, and should depend to a large extent on the landowner's land management objectives. There was also strong sentiment that the Department of Forestry needs to remain involved in some manner in the easement, as the program concerns forests.

Option A: Easement Holding Flexibility: This option offers the benefit of allowing for flexibility for both the landowner and the Department of Forestry at the outset of the program. It might be desirable for the initial phases of the program to offer the option of several different easement holders, such as the VOF, DGIF, or the DOF. Later, as experience is gained with the program, the Department of Forestry could choose to standardize who would hold easements.

Option B: DOF Holds Easement: A strong minority of participants felt that only the Department of Forestry should hold the easements. These participants felt that this is a forestry program that should be administered and monitored by foresters.

The Stakeholder Reference Committee identified funding for management of the easements as a key issue that would impact this decision over time. Some conservation organizations have learned that the cost of monitoring properties for proper implementation of the terms of the easement can be significant, and have required landowners to provide a "maintenance stipend" to help defray maintenance costs.

During the Stakeholder Reference Committee meeting, the U.S. Forest Service representative clarified that only state agencies and local governments are allowed to hold Forest Legacy easements, and that private nonprofits cannot currently hold these easements. Co-holding is not allowed, but co-monitoring is possible. Also, cooperative agreements with nonprofits are allowed whereby the easement is held by the state agency and the nonprofit performs most of the administration and monitoring.

One member expressed concern about having Forest Legacy easements held by different organizations; management should be uniform for all Forest Legacy tracts and this would support a single organization such as the DOF holding all Forest Legacy easements. Additionally, it was noted that the DOF has a network of regional staff who are trusted by landowners, and who could be called on to conduct the monitoring inspections. The Committee decided that more information would need to be obtained before a final decision could be made about where the easement should be held.

Forest Legacy conservation easements should be held by the Commonwealth of Virginia. The Virginia Department of Forestry should take the lead to develop a workable easement-holding scenario.

Length of Easement

One group in particular raised strong concerns about the meaning and desirability of an easement held in "perpetuity." They envisioned a scenario in which an easement is acquired on a property that becomes over the course of the next century surrounded by heavy urban growth. In this scenario, people envisioned that tax rates on the property would have risen significantly, and that the landowner may no longer be able to achieve any meaningful income from the property. Loggers, for example, might not even be available to harvest timber, as they might be too far away in rural areas. At this point, with the easement attached, the question was raised as to who would be able to afford to keep the property, and who would be able to buy the property. The suggestion was that only the very wealthy would be able to keep or buy such properties. Was this the purpose of Forest Legacy? What incentives would landowners have to enter into Forest Legacy, if they weren't wealthy? This regional group felt strongly that it is impossible for anyone to foresee what the future will hold in 100 or 200 or 500 years, and that Forest Legacy easements should enable adjustments to unforeseen circumstances in the centuries to come.

Given these concerns, the regional group reached a consensus recommendation that the Virginia Forest Legacy program should provide for reassessment of the easement after some specified length of time. Some suggested that easements be for "99 years," which is considered by attorneys as a condition that effectively means "in perpetuity" but which also allows for future unforeseen conditions and reassessment, much as the Panama Canal and Hong Kong situations were able to reassessed after 99 years. Others felt that reassessment might need to be on a shorter time scale of 50 or 75 years.

The Stakeholder Reference Committee discussed this issue and reached consensus that the Forest Legacy program is designed for easements to be held in perpetuity, and that it should remain thus. Landowners who are not interested in an easement

for perpetuity can explore alternative conservation tools, many of which are for shorter terms of conservation. One member noted that Forest Legacy may want to be able to assess whether a property still meets the program goals after a period of time, perhaps one hundred years. If a property was found to be unsuitable, after a period of time, could the state remove it from the program? The U.S. Forest Service representative noted that state condemnation of a property is possible, but that the state would have to make the Federal government "whole" by reimbursing it for the cost of the easement on that property. Overall, the Committee felt this was not a desirable scenario and that easements should be held in perpetuity. The Forest Legacy Program requires that easements be held in perpetuity.

Coordination of Easement Resources

Over and above all other suggestions and concerns was the strong message that conservation easement organizations need to find a way to coordinate and collaborate their efforts. The current array of tools is believed to be confusing to most landowners, and an obstacle to the pursuit of conservation easements.

Through lengthy discussions about this matter, the following suggestions have arisen as possible mechanisms for improving easement coordination and collaboration:

- Establish a central "conservation easement" **web page** that provides easy, user-friendly information on all of the various tools available. Links to different organizations would be provided. Perhaps there could even be a simple "self-assessment" or quiz online that would help a landowner figure out which tool, or combination of tools, would be best suited for the land in question.
- Establish a central **"hot-line"** concept for help on conservation easements. This concept is similar to the web page in that a landowner would only have to call one phone number to learn about all of the conservation tools available, and to receive personalized guidance.
- Establish a **central coordinating committee** of all the possible easement organizations, who will share information and collaborate to determine which easements or packages of easements are best suited and most cost-effective for a particular property. (*This suggestion directly relates to the notion of the State-Level Committee, above.*)

The Stakeholder Reference Committee greeted this concept with enthusiasm and quickly reached consensus on the following recommendation.

> ***The Forest Legacy Program should serve as an incentive for a meeting of all Virginia conservation easement organizations, private and public, to discuss ways in which coordination of conservation easements can be achieved, including the above ideas. The DOF should be responsible for initiating this effort.***

Proposed Criteria for Assessment of Applications

Without exception, all groups agreed that the best system of evaluation would use weighted point-system criteria, much as have been developed by other states. The weighted criteria would address the two different sets of interests of threats and qualities: e.g., how threatened is the land by conversion to non-forest uses, and what intrinsic qualities or benefits would be derived by placing this land in a conservation easement?

The Stakeholder Reference Committee agreed with the recommendations of the regional meetings, and adopted the following recommendation.

> ***The Department of Forestry, with the assistance of a Stakeholder Committee or the Stewardship Committee, should develop a matrix or weighted point system for evaluating individual tracts of land and give it a "trial run" on different tracts of land.***

Cost effectiveness V. Immediacy of Threats:

A second set of considerations also emerged from the public meetings. While the first evaluation of a property would be more quantitative, based on the weighted criteria, a second evaluation at the state-level should involve more qualitative considerations. When two or more properties are being considered relative to each other, complex judgements will need to be made. *Perhaps the most critical and difficult decision will be whether to spend Forest Legacy funds in more cost-effective areas or in areas where the threats of conversion are most immediate.* This question

emerged in each meeting and quickly became a central focus of concern and discussion.

There was no consensus among the groups on which of these considerations should take precedence. Some groups felt that cost-effectiveness should be the prime consideration, with secondary consideration to threats; this led to the suggestion that urbanized areas would be funded only rarely and that funds would be best spent principally on more rural areas such as Southside or Northern Neck areas or the southwest. Others felt that cost-effectiveness should be a consideration on a more equal basis with threats this led some to suggest that areas in the Piedmont or outer urban sprawl rings areas might take priority. On the other hand, most people acknowledged that there may be times when the qualities of the property and the immediacy of the threats may override cost concerns, and a special property in an urban area may need to be funded.

Another set of qualitative criteria was suggested at the very first meeting in Roanoke. It might be possible to establish four categories or "baskets" that would be given additional consideration. Categories suggested were: *properties that provide timber, biological diversity, protect the western mountain watershed, or offer urban and community forestry values.* Categories or "Baskets" such as these could be established at the outset, but amended or changed over time. The purpose for this second level of qualitative considerations is to enable judgements to be made based on other values important to the state. The "Basket" suggestion met with moderate support at other meetings, although there was confusion about how the categories would be defined and how they would work in practice.

In summary, it is important to note that there was general consensus among participants in the regional meetings that a second level of *qualitative* considerations should be incorporated into the decision process.

The Stakeholder Reference Committee agreed that the decision-makers should be able to make qualitative judgments about the candidate properties. The first evaluation step would be quantitative scoring according to established criteria, but there would need to be room for special considerations and characteristics to be taken into consideration.

The Committee also agreed that in the first years of Forest Legacy, while funding is still relatively small, that a greater priority should be placed on using the available dollars as cost-effectively as possible.

> ***Serious consideration should be given in the final decision-making to cost-effectiveness, threats to conversion, and donations or bargain sales. It is also recommended that a set of qualitative considerations be used in the final decision-making and that this set of considerations be re-evaluated and amended periodically.***

Final Considerations and Questions

The public involvement process has provided clear guidance on a number of issues that will define the Virginia Forest Legacy program. Based on the initial public response, Virginia Forest Legacy is bound to generate a lot of excitement and interest. Overall, participant involvement was positive, enthusiastic and extremely helpful in understanding stakeholder perspectives about Virginia Forest Legacy.

Lastly, a number of important questions were raised during the regional meetings and by the Stakeholder Reference Committee. These deserve attention in the next phase of refining the Virginia Forest Legacy program.

- The DOF should explore the experience of other states with regard to the costs of maintaining easements, and should keep the Stewardship Committee apprised of the financial needs of the program.

- It is important to recognize the need to work in partnership with other land trust organizations, and to encourage participation of land trusts in a variety of possible roles.

VIRGINIA FOREST LEGACY

Responses from Public Feedback Questionnaire

Note: Written comments were compiled from questionnaires which were handed out at each of the seven regional "Focused Public Discussions." The letter at the end of each comment refers to the region in which it was offered. In addition, pertinent oral comments are included at the end of each section.

This was not a scientific survey, nor was the information expected to provide a representative sampling. Rather, it is an attempt to obtain general impressions, substantive information, and guidance from people informed or concerned about Virginia's forest resources.

The proposed goal for the Forest Legacy Program is:

Virginia Forest Legacy will help to conserve Virginia's forests for future generations. Conservation easements will be the prime tool used to achieve this goal.

Comments (*written*)
Comments (*oral*)

- Should indicate fee simple option. B
- Clarify relationship between this program and other conservation programs. B
- Everyone should have a stewardship responsibility because public funds are being used. B
- Highlight the educational aspect of this program. B
- Too vague. Should list goals for acreage, money available, etc. E
- The federal goal is more specific. E
- The goal should reflect the symbolism of this program for the conservation movement. It should grab the attention of the individual reading it. E
- Needs to have qualification for multi-use basis. F
- Should be other incentives in program besides conservation easements. F

- ***Please rank order the most important threats (1=highest; 8= lowest) to Virginia's forests that will result in conversion to non-forest uses, which will be used to determine whether a geographic region should be given priority as a Forest Legacy Area.***

The following is a compilation of the perceived threats for each region, scored from highest to lowest. Following this, there is a breakdown of the scoring for individual regions.

Rank	Threat	Score
1	**Population growth and residential/commercial development.**	**664**
2	**Changing pattern of property ownership, causing forest fragmentation.**	**492**
3	**Increased land values.**	**482**
4	**Land clearing for non-forest uses.**	**481**
5	**Tax issues.**	**365**
6	Declining forest health.	281
7	Wetland conversions.	230
8	Recreational uses and recreational development.	193

Threats	A	B	C	D	E	F	G	TOT
Pop. Growth/residential/comm. development	95	79	163	87	107	68	65	664
Wetland conversions	40	26	53	38	22	21	30	230
Declining forest health	55	42	59	39	44	20	22	281
Changing pattern of prop. Ownership causing forest fragmentation	65	76	118	71	74	49	39	492
Increased land values	57	67	136	59	67	49	47	482
Tax issues	38	39	93	57	48	37	53	365
Land clearing for non-forest uses	80	63	107	56	66	51	58	481
Recreational uses and rec. development	20	20	58	19	29	25	22	193

Additional threats:

- Strip mining/surface mining (A)
- Increasing consumption of wood products (A)
- Clearcuts; bad timber management (A)
- Riparian Buffers (lack of); (B)
- Highway and road building (B)
- Urban tree decline (B)
- Lack of knowledge on part of the public. (C-3)
- High cost of land ownership, farming and forestry vs. low returns. (C)
- Citizen apathy. (C)
- Urban forested tracts and corridors. (C)
- Mixed forested areas within industrial zones. (C)
- High density subdivision (lack of strong zoning) (D)
- Underground nuclear testing - contaminates land; factories that pollute waterways or these protection lands. (E)
- Intrinsic values of forest parcel (G)
- Road building; logging and conversion to tree farms (non-forests) (C)

Comments (*oral*):

- Many of these threats are inter-related (population/fragmentation). C, E
- Declining forest health is a symptom of other threats and not a threat in itself. C
- Lack of strong zoning. E

• ***Please rank order the seven geographic areas in the attached map in order of greatest potential for Forest Legacy Areas? (1= greatest potential; 7=lowest potential)***

Highest ranked region = Area B (408 pts)
Second highest = Area C (406 pts)
(See graph)

• ***Please rank order the seven geographic areas in the attached map in order of greatest need for Forest Legacy Areas? (1= greatest need; 7=lowest need)***

Highest ranked region = Area E (475 pts)
Second highest = Area F (417 pts)
(See graph)

• ***In your local region on the attached map, are there areas and/or opportunities of significant potential that should be considered for Forest Legacy Areas? If so, please specify. (Additional written comments may be forwarded to the Department of Forestry. See below for address.)***

• ***In your local region on the attached map, what do you think are the two or three leading pressures or reasons why landowners would convert forest land to non-forest uses?***

Please rank order the* top ten *criteria that should be used to determine whether a specific tract of land is eligible for Forest Legacy assistance? (1=highest; 10=lowest)

Note: The following is a compilation of the proposed criteria, scored from highest to lowest.

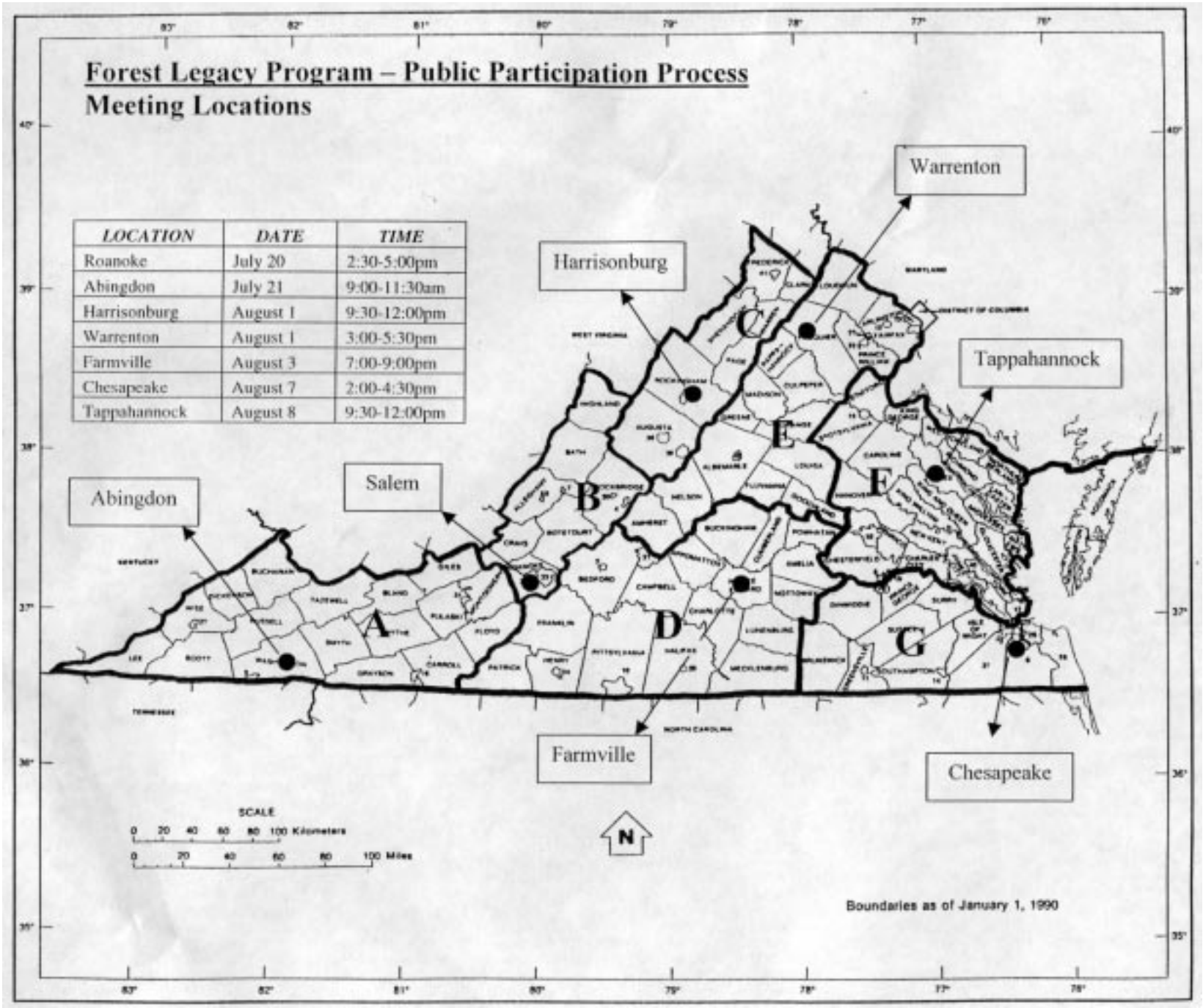
Rank	Score	Criteria
1	**674**	**The forest protects and conserves water quality.**
2	**605**	**The forest provides and protects habitat.**
3	**471**	**The forest is sustainable.**
4	**443**	**The forest is adjacent to another protected area.**
5	**376**	**The forest provides local cultural/economic vitality to rural comm.**
6	369	The forest provides scenic and aesthetic values.
7	357	Development of the parcel would neg. affect adjacent land.
8	351	The forest helps prevent further degradation of air quality.
9	327	The forest provides important recreational opportunities.
10	277	The forest contains a variety of age and size classes.
11	262	Acquisition of the conservation easement is cost-effective.
12	257	Geographical location.
13	249	The forest provides significant wood products
14	185	Higher population density given preference.
15	133	Minimum parcel size.
16	68	Lower population density given preference.

Criteria	A	B	C	D	E	F	G	TOT
The forest is sustainable	71	64	106	61	77	47	45	471
The forest protects and conserves water quality	114	84	152	92	96	59	77	674
The forest provides and protects habitat	108	89	149	75	75	57	52	605
The forest contains a variety of age and size classes	36	31	84	33	36	23	34	277
The forest provides significant wood products	20	27	88	32	20	26	36	249
The forest helps prevent further degradation of air quality	44	39	77	54	50	40	47	351
The forest provides important recreational opportunities	49	38	81	29	50	45	35	327
The forest provides scenic and aesthetic values	38	60	76	54	47	49	45	369
The forest provides local cult./econ. vitality to rural comm	43	56	92	37	55	58	35	376
The forest is adjacent to another protected area	73	77	114	36	76	51	16	443
Development of the parcel would neg. affect adjacent land	57	57	98	42	47	33	23	357
Geographical location	38	14	104	15	42	25	19	257
Acquisition of the conservation easement is cost-effective	38	49	75	24	29	15	32	262
Minimum parcel size	1	19	56	12	16	27	2	133
Higher population density given preference	31	0	55	29	47	6	17	185
Lower population density given preference	0	7	28	20	1	4	8	68

Additional Criteria:

- **Contributes to wildlife corridors between/among other forested tracts (C-4)**
- **Teaching experience/growing trees (C-2)**
- National Forest! (A)
- Remains as natural forest (vs. plantations) (A)
- The tract is available for sale or general title transfer (opportunity counts!) (B)
- Connects other forests, thus reducing forest fragmentation; identified in state or local plans as important for conservation; other partnership funding; heritage assessment. (B)
- Local community interest/support. (C)
- High priority areas selected on a case basis by VDF (C)
- Native forest, not pine plantation; low income owners who need funds to help keep land in forests and property taxes rise. (C)

- ***We welcome any additional comments or suggestions you may have for the Forest Legacy Program !***


Forest Legacy Program – Public Participation Process
Meeting Locations
LOCATION | DATE | TIME
Roanoke | July 20 | 2:30-5:00pm
Abingdon | July 21 | 9:00-11:30am
Harrisonburg | August 1 | 9:30-12:00pm
Warrenton | August 1 | 3:00-5:30pm
Farmville | August 3 | 7:00-9:00pm
Chesapeake | August 7 | 2:00-4:30pm
Tappahannock | August 8 | 9:30-12:00pm
Warrenton
Harrisonburg
Tappahannock
Salem
Abingdon
Farmville
Chesapeake
A
B
C
D
E
F
G
SCALE
0 20 40 60 80 100 Kilometers
0 20 40 60 80 100 Miles
N
Boundaries as of January 1, 1990

VIRGINIA FOREST LEGACY

QUESTIONS AND ANSWERS

JULY 2000

WHAT IS THE FOREST LEGACY PROGRAM?

Virginia is one of the first southern states to initiate a new program called Forest Legacy, which aims to *protect and conserve important forests that are threatened by conversion to non-forest uses,* such as development. Led by the Virginia Department of Forestry, Forest Legacy will be an important tool for preserving Virginia's forests through the anticipated coming years of continued growth. Forest Legacy is distinct from other conservation programs in that it will focus specifically on important forest lands and will require a Stewardship Plan or a Multiple Resource Plan for each tract accepted into the program.

Authorized by the Cooperative Forestry Assistance Act of 1978, Virginia may use Forest Legacy funds to purchase conservation easements or land. The Department of Forestry plans to focus most of its efforts on the purchase of conservation easements as a way to enable conservation of the greatest amount of forest land.

Priority consideration will be given to threatened forest lands which have important values. These values will be defined with the assistance of the Public Participation Process, and may include such things as the ability of the forest to protect water quality, fish and wildlife habitat, recreation, timber production, rare communities, or scenic and aesthetic values.

Virginia is in the process of developing a proposal that it will submit for federal approval, and hopes to launch its Forest Legacy program by early 2001. Once Virginia develops its Forest Legacy program, it will receive federal dollars that can benefit landowners and conservation in the Commonwealth.

WHAT IS THE ASSESSMENT OF NEED?

Virginia is in the process of developing an "Assessment of Need" which it will submit as part of its overall proposal to the U.S. Forest Service. This Assessment of Need will:

- Document the specific need for a Forest Legacy Program in Virginia.
- Establish eligibility criteria particular to Virginia.
- Identify and delineate boundaries of forest areas meeting the eligibility requirements or designation as Forest Legacy Areas.
- Recommend priority areas to the Forest Service and Secretary of Agriculture for inclusion in the Forest Legacy Program.
- Include relevant information about both public and private forest lands. It will analyze how to best maintain the integrity of forest lands for future generations.

The Assessment of Need will be completed by the Department of Forestry in late August 2000, after all public comment is compiled and incorporated. It will then be submitted to the State Forester, after which the State Forester will submit the complete Assessment to the United States Forest Service for review.

WHAT IS A "FOREST LEGACY AREA"?
A Forest Legacy Area is a geographically defined part of the state where tracts of land will be eligible for protection under Forest Legacy.

Virginia will establish its Forest Legacy Areas by identifying areas that contain environmentally important forests, and where those forests are most threatened by conversion to non-forest uses. Environmentally important forests may offer important geological features, mineral resources, wildlife habitat including threatened and endangered species, cultural resources, recreational resources, timber management, and aesthetic and scenic values.

While most states have chosen to define discreet Forest Legacy Areas within their state, some have designated the entire state as a Forest Legacy Area. The Department of Forestry will use the Public Participation Process to provide input on the how Virginia's Forest Legacy Areas should be defined.

HOW DOES THE PUBLIC PARTICIPATION PROCESS WORK?
Virginia is initiating a Public Participation Process to enable the interested public to submit comments on the Forest Legacy program, as it is being developed. These public comments will be included in the Assessment of Need, which will then be submitted for review to the U. S. Forest Service.

Specifically, the Virginia Department of Forestry has contracted with the UVA Institute for Environmental Negotiation to design and facilitate the state's public participation process. The goals of this process will be to enable a wide range of interested stakeholders to provide comment, concerns, and suggestions to the Department of Forestry.

The Virginia Public Participation Process attempts to cast a broad net to invite a broad range of responses and feedback in a short amount of time. Public comment will be received in several different ways. "Focussed Public Discussions" will be held in seven different regions of the state: Abingdon, Salem, Harrisonburg, Warrenton, Farmville, Tappahannock, and Chesapeake. Persons representing different interests are being identified and personally invited to these meetings so that representation of different interests is ensured. Also, notice of these meetings will be provided in local newspapers so that other interested persons may attend the meetings.

Another way in which public comment will be solicited is through a broad mailing by letter and email in which interested persons will be informed about the program and invited to provide comment through a questionnaire. Similarly, legislators, local governments, and organizations will be contacted. The questionnaire will be available on the web, by email, or by postal mail.

Public input is specifically desired on 1) what parts of the state should be included in the Forest Legacy program as Forest Legacy Areas, and 2) the criteria for determining if a specific tract of land is eligible for program funding.

HOW WERE THE PARTICIPANTS FOR THE PUBLIC INVOLVEMENT PROCESS "FOCUSED PUBLIC DISCUSSIONS" CHOSEN?

The Department of Forestry was asked to provide names of persons who might represent the following interests: *landowners, elected officials or local and county governments, forest industry, conservation and environmental organizations, chambers of commerce, land trusts, cooperative extension, academic institutions, youth.* The Institute for Environmental Negotiation telephoned these people to extend personal invitations. During these calls, additional names were often suggested and contacted. Additionally, newspaper advertisements for the meetings will invite other interested persons to attend.

WHAT IS UNIQUE ABOUT THE FOREST LEGACY PROGRAM THAT DISTINGUISHES IT FROM OTHER CONSERVATION EFFORTS?

The Forest Legacy Program is unique in that it aims to conserve land that is specifically threatened from conversion to non-forest uses, and allows for those lands to be managed by individual landowners as outlined in a Forest Stewardship Plans or LOMP. The Department of Forestry will provide technical assistance to the individual landowners whose land is accepted into the Forest Legacy Program.

WHAT IS A CONSERVATION EASEMENT?

A conservation easement is a legal agreement that a willing property owner makes voluntarily to restrict the type and amount of development that may take place on their land. The conservation easement is either donated to, or purchased by, the organization holding the easements. In this agreement some land uses are prohibited or restricted through conveyance of certain land rights. The landowner retains title and all remaining land rights not specifically conveyed or prohibited in the easement.

ARE CONSERVATION EASEMENTS BINDING ON FUTURE LANDOWNERS?

Yes, the original owner and all subsequent owners are bound by the easement. The easement is recorded at the county or city records office so that all future owners and lenders will learn about easement restrictions when they obtain title records on the property.

HOW MUCH WILL A PARTICIPATING LANDOWNER BE PAID FOR A CONSERVATION EASEMENT?

Payment for a conservation easement is based on the Fair Market Value of the property under easement, using Federal Appraisal Standards. The value of the easement may also vary depending on the rights that the landowner chooses to retain or to convey or through the easement.

IS THE FOREST LEGACY PROGRAM VOLUNTARY?

Yes, entry into the Forest Legacy Program is strictly voluntary. No conservation easements may be placed on any property unless a voluntary application is submitted by a landowner.

WILL ACQUISITION OF AN EASEMENT GRANT PUBLIC ACCESS TO THE LAND?

NO. Public access will not be sought. However, the landowner has the right to request that public access be granted if he/she so chooses.

ARE LANDOWNERS REQUIRED TO HAVE A MANAGEMENT OR STEWARDSHIP PLAN FOR THE FOREST LEGACY PROGRAM?

Yes, Forest Stewardship Plans or LOMP are necessary in order for a particular piece of land to be considered eligible for the Forest Legacy Program. However, if one does not already exist, a Forest Stewardship Plan may be developed as part of the application process. Landowners are encouraged to contact the Department of Forestry to obtain information on Forest Stewardship Plan standards. Such plans are not to limit landowner's management of their forests, but are to ensure that landowners receive professional advice on how best to manage their forest land to meet their goal(s) and objectives.

TO BE ELIGIBLE, DOES A TRACT OF LAND NEED TO BE COMPLETELY FORESTED?

No, tracts must be 80% forested.

WHO WILL REVIEW APPLICATIONS?

Once the Program is approved, individual landowner applications will be reviewed by the Department of Forestry to determine if the tracts meet the eligibility criteria and state priorities.

WHOM CAN I CONTACT FOR MORE INFORMATION ABOUT THE FOREST LEGACY PROGRAM?

Please contact Mike Foreman of the Virginia Department of Forestry at 804/ 977-6555, foremanm@dof.state.va.us, or 900 Natural Resources Drive, Suite # 800, Charlottesville, VA 22903.

July 14, 2000

SAMPLE CONFIRMATION LETTER TO
PARTICIPANTS IN FOCUSED PUBLIC DISCUSSIONS

Dear _____:

I am writing to confirm your participation in a FOCUSSED Public Discussion concerning the Virginia Forest Legacy Program. I thank you for your willingness to participate in this discussion. The main purpose of this meeting will be to obtain your ideas about what parts of the state should be included in the Forest Legacy program, and the criteria for determining whether a specific tract of land will be eligible for program funding.

The meeting will be on Friday, July 21 from 9 AM to 11:30 PM at the Community Volunteer Fire Department in Abingdon, VA. Attached is a map with directions to this location.

The Forest Legacy program is a federally-funded conservation program that is being developed in Virginia by the Department of Forestry. The UVA Institute for Environmental Negotiation has been asked to design and facilitate the public participation process. We are holding seven FOCUSED Public Discussions in different geographic areas of the state. Each Discussion will include up to fifteen persons representing different interests who have been personally invited, such as yourself, as well as other interested persons from the public.

Persons who have been invited may represent the following interests: *landowners, elected officials or local and county governments, forest industry, conservation and environmental organizations, chambers of commerce, land trusts, cooperative extension, academic institutions, youth*. As a consequence, your participation is very important, as you may be the only person at the meeting capable of representing a particular interest group.

Enclosed is a Question and Answer fact sheet about Forest Legacy which will help prepare you for further discussion at the meeting. We are looking forward to your presence at the upcoming Focussed Public Discussion. If you have any questions please contact John Hoover or myself at (804) 924-1970.

Sincerely,

Tanya Denckla
Senior Associate

P.S. If you are no longer able to participate in this meeting, please call us as soon as possible at 804/ 924-1970 so that we may invite another person who will represent similar interests. Also, we welcome suggestions for such a replacement. Thank you!

Attachments: Directions to Meeting Location; Question and Answer Fact Sheet, State Map of Public Meetings

INSTITUTE FOR ENVIRONMENTAL NEGOTIATION
School of Architecture
University of Virginia
164 Rugby Road – P. O. Box 400179
Charlottesville, Virginia 22904-4179

July 27, 2000

Dear Forest Conservationist:

I am writing to inform you about Forest Legacy, a new forest conservation program, and to invite your comments and perspective about how the Forest Legacy program should be shaped.

Forest Legacy is a federally-funded conservation program that is being developed by the Virginia Department of Forestry. The UVA Institute for Environmental Negotiation has been asked to design and facilitate the public participation process, which is being conducted from July through August 15, 2000. We are reaching out in a variety of ways to persons who might be interested in Forest Legacy, through regional meetings, web-based information, listserves, email and direct mailings.

Virginia is one of the first southern states to initiate Forest Legacy, which aims to protect and conserve important forests. The specific target of Forest Legacy is to protect forests that are threatened by conversion to non-forest uses. Forest Legacy will be an important tool for conserving Virginia's forests through the anticipated coming years of continued growth. Forest Legacy is distinct from other conservation programs in that it will focus on threatened forest lands and will require a Stewardship Plan or a Land Owner Management Plan (LOMP) for each tract accepted into the program.

Funded under the 1990 Forest Stewardship Act, Virginia may use Forest Legacy funds to purchase conservation easements or land. The Department of Forestry plans to focus most of its efforts on the purchase of conservation easements as a way to enable conservation of the greatest amount of forest land.

If you are interested in learning more about Forest Legacy, you may access further information on the Department of Forestry's website: www.dof.state.va.us. Or you may call Mike Foreman for an information packet at 804/ 977-6555.

We invite you to submit your comments and ideas for the program through the Public Feedback Questionnaire, which is available on the website and in the information packet that can be mailed to you. This questionnaire elicits your ideas about what criteria should be used for determining state-wide priorities and whether a specific tract of land is eligible for program funding. The questionnaire should take no more than about 15 minutes to complete, and may be faxed, emailed, or mailed back to us.

We will include any comments received by Wednesday, August 9 in the final program development and documentation that will be sent to the U.S. Forest Service for formal review. We would be happy to receive any comments after that date, as well, but will not be able to incorporate these comments in developing the program or its documentation.

Thank you for your time and consideration.

Sincerely,
Tanya Denckla
Tanya Denckla
Senior Associate

Forest Legacy Web Info: www.dof.state.va.us
Forest Legacy Information Packet: Mike Foreman, 804/ 977-6555

FOREST LEGACY PROGRAM (FLP)

Focussed Public Discussion

SAMPLE AGENDA

2:30 - 5:00 p.m.

2:30 Welcome, agenda and goals for the meeting

2:40 Informational Presentations

- Forest Legacy Program: history, state requirements
- Virginia's preliminary assessment of need
- Overview of decision process and role of public, how public input will be used, ways in which public comments can be received.

3:10 Questions and Answers

3:20 Questionnaire and Discussion

- Overarching Goals for the Virginia FLP
- Criteria for Designating Forest Legacy Areas
- Eligibility Criteria for the individual properties

- (10 min) Questionnaire – silent time for individuals to fill out; to elicit initial responses
- (45 min) Discussion

4:15 Delineation of Draft Forest Legacy Areas, using maps

4:45 Summary, and Next Steps (e.g., when participants can expect to receive information about the outcomes of all the meetings)

5:00 Adjourn

Forest Legacy Program-
Focused Public Discussion

Abingdon, VA - July 21, 2000

Name	Organization
John Lentz	Landowner
Bernie Smith	Williamette Industries
Thomas Evans	Forestry Consultant
Don Gowan	The Nature Conservancy
Jim Willis	Virginia Cooperative Extension
Douglas Ogle	Professor of Env. Science
Jim Kelly	Hungry Mother State Park
Dennis Desman	Applachian Sustainable Development
Skip Skinner	Planning Commission
Neal Kilgore	Upper Tenn. River Roundtable
Phil Shelton	UVA's College at Wise
Steve Brooks	Forest Watch
John White	Interested Citizen
Chuck Hutsell	VDOF
Detta Davis	Clinch Coalition
Kevin Kowe	VDOF

Salem, VA - July 20, 2000

Name	Organization
Charlie Blankenship	Landowner/retired forester
Rupert Cutler	Landowner/ WV Land Trust/Explorer Park
Staff for Vic Thomas	Delegate
Elmer Hodge	County of Roanoke
Janet Scheid	County of Roanoke Planner
John Hancock	Westvaco Corp.
Liz Belcher	Greenways Coordinator
John Bradshaw	Valley Beautiful
Beth Doughty	Chamber of Commerce
Michael VanNess	Western VA Land Trust
Charles Barnes	Stewardship Landowner
Dillan Jenkins	VT - Forestry
Larry Martin	Friends of Brushy Hill
Bill Modica	Blue Ridge Environmental Nework
Frank Burchinal	VDOF
Denny McCarthy	VDOF

Harrsionburg, VA - August 1, 2000

Name	Organization
O.L. Long	Retired Forester
Tony Wilt	Landowner
Mary Joy Scala	Valley Conservation Council
Chris Bolgiano	Wilderness Society
Clark Upton	Landowner
Lynn Cameron	Conservationist
Pete Benedetto	Stewardship Landowner
Gloria Ritchie	Landowner
Culen Sherwood	Env Science Professor
Rhonda Henderson	R'Ham Planner
Wes Ford	Private consultant
Michael Griffin	VDOF
Jeff Everett	Valley Conservation Council
Jerry Williams	VCC/Landowner
Bonnie N. Hoover	Neff Lumber Mills
Pablo Cuevas	R'Ham Board of Supervisors
Bill & Helen Braunwort	Landowners
Abbe Kennedy	Town Planner, Woodstock
Steven Krichbaum	Forest Watch
Christina Wulf	SEDGE
Mary Ruberry	landowner
Mark Hollberg	VDOF

Farmville, VA - August 3, 2000

Name	Organization
Ted Harris	500-Year Forest Foundation
W.H. Burruss	Real Estate Land Institute
Carrel B. Tuck	Board of Supervisors, Brunswick Co.
Russell Holland	Landowner
Jonathon L. Pickett	County Administrator, Prince Edward Co.
Jimmy Garnett	Landowner
Philip Vanoorbeec	County Administrator, Amelia Co.
Gary Heiser	VDOF
Taylor Harvie	Board of Supervisors Amelia Co.
Randy Kyner	Conservation Forester
Brad Fuller	Forest Industry
Bill Bradford	Board of Supervisors, Buckingham Co.
Thomas R. Terry	Landowner/Educator
Hap Hagwood	Forest Watch

Katie Register	Clean Virginia Waterways/ Longwood College
Heather Bullett	Longwood College
Kirby Burch	VDOF
Greg Winston	VDOF

Warrenton, VA - August 1, 2000

Name	Organization
Lloyd MacAskill	Potomac Applachian Trial
Ross Alliston	Landowner
Tom Harris	Piedmont Environmental Council
Phil Clark	Landowner
John Hoffman	Landowner
John Miller	VDOF
Mike Griffin	VDOF
Tom Reeder	Gladfelter Corporation
Ed Milhous	Arborist/ISA/Urban Forest
Christina Dudek	Potomac Conservancy
Meredith Lathbury	Potomac Conservancy
Andrew Gerachis	VA Coorpative Extension
Ed and Kimberly Wright	Landowners
Walt Hitchcock	Fauquier Area Development

Chesapeake, VA - August 7, 2000

Name	Organization
L.R. Luton	Remax & Landowner
Jack & Anne Carvil	Landowners
John Carroll	VDOF
R.W. Jackson	Virginia Cooperative Extension
Russell Holland	Landowner
Rob P Taylor	Landowner
Ronnie P Taylor	Landowner
Sara Milton	intersted Citizen
Adella Wilson	interested citizen
Pam Schultz	landowner and investigator
Kirby Burch	VDOF
Watson Lawrence	Virginia Cooperative Extension

Tappahannock, VA - August 8, 2000

Name	Organization
Tom Teeples	Audobon Society
Henry Bashore	retired forester, real estate, Audobon Society
Joanne Lee	Stratford Plantation
Larry Hill	RC&D
Bette Anne Garrett	Landowner
Bill Wright	Landowner/ Wood Preservationist
Dean Cumbia	VDOF
Bill Saunders	VDOF
Gary Cooper	Landowner
Wilmer Stoneman	Farm Bureau

Clarification of Goals and Terms Needed

- Proactive or Band-Aid? It should be clear in the goal. E
- Too vague. How about how many acres and by when? And shouldn't it include fee simple purchase with conservation easement. E
- Good. It doesn't match the "goal" on the handout. That one is better. E
- I would like to see definitions of terms so that all participants are discussing the same ideas. ie. Forest, development, land owner, "values". Who would oversee the management and are there funds and the manpower to enact this program?A
- Define forests broadly.B
- The proposed goal is fairly broad-consensus for what? Wood products?Habitat? Water quality?B
- Be sure to define " conserve Virginia's forests" broadly to reflect the public interest in maintaining urban, biologically diverse, natural forests, as well as working forests.
- Conserve should be defined to include, but not limited to, working forests(production of forest products). Forests for this program should be defined so as to avoid(not necessarily prohibit) conversion of natural forests to monoculture trees and plantations. A
- Some clarification of inter-relationships with other conservation programs(TVA Watershed)A
- How is this like the sale of mineral rights ?D
- Needs to have qualification that this program will be for multi-use so it is clear that in 100 years the program is for harvesting too. F
- The question of term versus "forever" is important. Determine what's effective 100 years from now seems impossible. F
- Save indication that management and harvesting can and will occur. This statement may mislead that harvesting can occur. F

Best Used With Other Programs and Tools

- Leveraged with other conservation, negotiation and educational efforts, however, it becomes a more powerful tool to affect perception. In my mind, its value is in catalysts not consumption. E
- Best used in cooperation with other programs and agencies that protect land from development either by purchase or easement. B
- To the extent practical link this program to other ongoing programs that relate to reasons for retaining forest lands. This program should not be the prime tool but one of many tools. F
- Another tool in the toolbox and a modest one on its own. E

Use of Conservation Easements is a Good Idea

- Great! Much Needed! C
- Great Idea! This will help people who want to protect their land, but can't afford it. We need this. C
- Yes, particularly purchased easements rather than donated easements since purchased easements favor a landowner with modest means. C
- Excellent-no purchase in fee needed-keep land in private hands! C
- Virginia should get involved with this and should only use conservation easements. C
- Conservation easements are the best method to leverage funds. Fee simple is not a good idea. Non-profits such as the Valley Conservation Council should be instrumental in the process because we are already established as an easement-holding entity. Conservation easements benefit landowners of modest means. C
- I like it because it is a voluntary taking of property rights to accomplish conservation. E
- This is a timely program. A
- Easements will stretch the money further than fee simple purchase. F
- Use easements AND fee ownership-use fee particularly when next to other areas of public ownership. B
- Excellent idea to preserve open spaces. D

- VDOF needs to promote this program and other non-timbering options aggressively C
- I fully support this effort. I feel it is very important to properly manage as much of our land base as possible for future generations. A
- I agree with the goals of this program.D
- Goal sounds okay.G
- Good. Kiss B

Continuing Concerns

- Sounds good, but I remember the "no net loss of wetlands" debacle wherein wetlands were/are destroyed by no longer calling them wetlands. An example of defining a problem out of existence. Tree farms should not be considered forests. Tree farms are a destructive conversion that should not be a part of Forest Legacy. C
- The stewardship criteria should not be limited to just VDOF program.D
- On the surface it's a good idea.D
- It will be important to emphasize the stewardship or management plans as necessary to procure the easement.D
- Suggestion: contract should be re-negotiable every 50 years.G
- Sounds good if the resource(trees) is the highest priority. C
- Keep Virginia green. There is enough development already in northern Virginia.C
- Bureaucracy needs to be kept at a minimum. Do not duplicate the administration of the program. C
- If the administration of the program can be fairly simple, there should be many benefits. C
- The VDF may best use the Forestry Legacy Program in a very small, limited # of situations. It is best administered by the VDF through local conservation districts and/or county planning. C
- Great idea but grossly underfunded.E
- As a resident of Warren I am seriously concerned about the land use and forest conservation. Ensuring a better quality environment is necessary in preserving our future. I sit here today as a concerned listener but not as an informed participant and therefore feel my answers would be a misrepresentation of the sampling you are trying to achieve. E
- The program must be flexible enough to meet with the landowner's needs and keep our forests intact and protected. A
- Forests should be all-inclusive. Omitting monoculture is a species goal. Many of the pine stands we see in southwest Virginia are the result of a farmland abandonment. They serve the same functions. A
- There are many different ways to protect forest land. This program should stay focused on one and do it well.B
- There is a need for coordination among donors of funds to purchase easements-in a given region. B
- Sustainable harvest and management needed.B
- Retention of sizeable forest tracts for a variety of benefits. B
- This will best work with enforceable legislation while restricting local tax assessments to reasonable levels, thus lengthening the period of effectiveness. F
- Object to it in perpetuity. F
- The program should use incentives to mix with state and other tools not just easements. F

Oral Comments on Individual Regions

(see map)

Note: These comments have been compiled from discussions on individual areas at each meeting.

	Potential	Need
A	• Rural • endangered species • lots of forested areas in this area • low cost of dev. rights • depressed economy • need for proper timber management • mining influence • high biodiversity	• threat to biodiversity & water quality • selling of land (due to econ. cond.) • population pressures • protect now before dev. encroaches, tourism • logging compliance • large areas of protected land (ben: contiguous tracts, dis: already protected)
B	• similar to A, however, more population pressures • large forested areas • low population • low cost of dev. rights	• population pressures • large areas of protected land (see A)
C	• productive forests • pop. growth • threatened water quality • headwaters of Chesapeake Bay	• area is threatened by development • fragmentation • large areas of protected land (see A)
D	• is being fragmented • money could go a long way • industry holdings	• some important species in this area • losing family farm & tobacco crisis
E	• urban forests • unique areas along Blue Ridge • historical sites	• great population/tax pressures
F	• area is important to Ches. Bay • rivers • much forest industry lands • viable forest • few protected areas	• metropolitan areas that feed into bay, preserve rivers and coastal plains, wetlands • threatened by golden crescent
G	• large forested areas (industry holdings) • development pressure • unique forests	• traditional forestry • metropolitan areas that feed into bay • many people to benefit (gen. populous) • Eastern Shore threatened

VIRGINIA FOREST LEGACY

Oral Comments and Concerns from Public Involvement Meetings

Note: These comments were recorded from the discussions at each of the seven public involvement meetings. The letter at the end of each comment refers to the region in which it was offered. The proposals found at the end of this section are further discussed in the Preliminary Findings and Recommendations.

A-Abingdon B - Roanoke/Salem C - Harrisonburg D - Farmville E - Warrenton
F - Tappahannock/Warsaw G - Chesapeake

Comments

1. Administrative

a. Local government involvement

- Counties need to be informed. This program should tie in with the local land use and comprehensive plans. B
- Local governments should help administer program. This would help save some of the administrative costs of this program. C
- It would be beneficial if multiple jurisdictions collaborated on helping to implement this program.E
- There should be an emphasis on the process: reaching out to the public and collaborating with key partners and local governments.E
- Program should work with county comprehensive plans.D
- Use program funds as bait for local municipalities to start their own program. (This discriminates against poorer counties).D
- municipalities should fund own programs F

b. Other conservation efforts

- Should seek to partner with other land trusts to make the process easier for landowner and in order to pool resources.B
- There should be an effort to coordinate between conservation programs to reduce the amount of overlap.C
- The money for this program should be used for existing conservation efforts.E
- The money should be used to create an information program about conservation.E
- This program should dovetail with VLCF an establish regional committees to review applications.C

c. Other suggestions

- Enforcement of easement is very important in the long run.D
- Landowner should notify DOF when timber harvesting takes place so that acceptable control measures are in place. A
- The implementation of this program in other states should be researched. E
- Should be a simple application process for the landowner. B

2. Easements

- DOF should hold easement. G
- Easement should be renegotiated after 50 years. G
- Recommend a 99 year lease instead of in perpetuity for easements. F
- landowner should have option to chose who will hold easement. F
- The easement needs to properly recorded and the future landowners should be well notified about its implications.D

- Forest management practices change. It should be stressed to the landowners that easements are binding in perpetuity.A
- There should be a clause in the easement which allows it to be altered with both consent of both parties.A
- Payment for easements might dampen the inclination to donate easements. Response: People who donate easements usually are would do it anyway regardless of competing program which offers money. B

3. Criteria

- Should set a minimum acreage to encourage landowners to band together to form contiguous areas. B, D
- Strip mining should be ineligible under the FLP. A
- Swamp land (forested wetlands) are a good opportunity for conservation. G
- Should select smaller tracts that are strategically located. G

Concerns/Questions

1. Eligibility Issues
   - What about areas that aren't forested? Will they be accepted into the program if the landowner plans to plant trees A
   - Are corporations eligible? A
   - Does this program distinguish between natural forests and monoculture stands? B
   - Specifically, what constitutes a forest? 80 stems an acre? B
   - Could someone sell the mineral rights for an FL tract at a later date? B
   - Can you mine fore resources… G
   - Will the landowner be paid for standing timber (as a resource) as a part of the negotiated easement cost? G

2. Tax issues
   - Once a conservation easement is placed on a tract of land, there will be less revenue generated by the county in taxes on that land. C
   - reducing tax base, however, co. does not have to supply infrastructure and services (A, C)
   - tax incentives depend on county assessment (land use vs. best use)
   - If two landowners agree to band together, would it be possible for one to receive the tax benefit from both if there is mutual consent? A
   - Can a landowner use funds from the purchase for a like-kind exchange? D
   - tax burdens will still be too great F
   - lean G

3. Concerns over Federal Involvement
   - There is concern that there will be strings attached to this money since it was appropriated by the federal government. C, E, D, F
   - Federal government will eventually change program so that timber cannot be cut on one's land. E, C

4. General/Admin
   - The language that is used to define this program is very important. E
   - Often, the financial penalties for non-compliance on conservation easements are not severe enough to change the pattern of behavior. E
   - There is concern that stewardship plans do not have an enforcement value. E

- This program is underfunded. E
- Enforcement is crucial to the efficacy of this program. E
- Who pays the closing costs? (Leave it open for negotiation.) D
- There is concern about the longevity of the program. G
- There is concern about imminent domain. (Land can still be seized, however, an easement on a piece of property makes it much more difficult.) G
- The landowner who has a conservation easement should be a part of the imminent domain proceedings. G
- Is the FLP proactive in selecting tracts? B
- Could the application process go through a local authority? B
- Criteria Issues
- Aesthetic values are part of this program. How do you determine these objectively? E

5. Easement Issues

- What if it becomes impractical to manage the land in this program in the future. Is there allowances for this? There is a need for strategic planning of land use. E
- Concern that "you are shooting yourself in the foot" by signing the easement for perpetuity. G
- some would not enroll in program if certain environmental groups were responsible for holding easement. G
- In perpetuity might not be forever. Lawyers have raised issues with other types of easements. F
- Is there an option not to sign an easement in perpetuity? It is a disincentive for those who do not want to encumber future generations. F
- buyback option in X years F
- Who has the fiscal responsibility for monitoring the easements? A
- importance on negotiation of of easement F

Proposed FLA's

- Will the state receive more money if it designates FLA's?
- The whole state should be eligible. B, C, D
- This spreads the limited resources too thin. A
- If an area is excluded in the first year, the program could be amended to include it at a later date. A
- The goal is too big. You could spend it anywhere. A
- If the money was focused on an area, it would show more of an impact. A
- No lower priority should be given to more populous areas (areas in red on the map) B
- If you define the area to be too small, you will preclude local government funding. A
- Preservation of the more urban areas should be dealt with by the local governments in that area. C, D
- Should weight Southeast/Southcentral due to reasons above. D
- Lower priority for extremely remote areas. C
- Use well-established criteria instead of dileneating priority areas. C
- Because of limited funding, start program with a focus on particular areas and amend program at a later point in time. D
- Should not focus on areas A, B, and C, because there is already much protected land there. G
- Preventing fragmentation of forested tracts should be of utmost importance to this program. B
- There should be a focus on urban forestry, connecting forested tracks within the city. B
- Establishment of wildlife corridors between the Blue Ridge and the Allegheny Mountains should be a priority. C
- Rural vs. Urban focus
- Rural – more cost effective

- Rural/Urban interface - greater need for protection in these areas
- Should select tracts from all regions of the state, which would have an educational value. C

Proposals

1. ***Regional advisory groups could be instrumental in identifying eligible tracts.*** B

- There is a need for input, however, it would be a lot of work. D
- Use regional planning districts or state stewardship committee. D
- Too political E
- Educational opportunities exist for such a group. This group could raise awareness of the tools which are available for conservation and the variety of different programs which are available. E
- The group could be strictly advisory in nature and would not make decisions. E
- If there are too many people involved, things will not get accomplished. E
- need for unbiased decision F
- Need balance in perspectives F
- should have a lawyer (tax issues), forester, a number of landowners F

2. ***Possibility of creating different sets or "baskets" of criteria emphasizing different types of "working forests."*** These "baskets" would be used in lieu of Forest Legacy Areas. There should be a weighted systems which would balance out the different categories. These categories are as follows: B

a) Biodiversity
b) Urban
c) Wood Basket
d) Western Mountain Watershed

Response:

- This is a good idea because there are so many interests involved. E
- Representatives from each group or "basket" should make decisions. E
- Learn from existing conservation efforts, such as the LCF. E
- Should combine all groups into one pool. E
- focus on more rural areas F
- not enough money for four baskets G
- Distribution of selected tracts should be equitable between categories. A

Classified Forest – 1922

$1 assessed value for taxes. can log/manage. can develop but must pay back taxes if you do.

Abingdon

- This will depend on individual needs and desires. A
- See National Park Service significant Landmarks document and VA Natural Heritage Sites.
- Coal bearing lands where the surface is privately owned but the mineral rights have been severed and are corporately owned. A
- This depends on the selection criteria that are decided on! A
- Not aware of need. Criteria has not been defined. A
- Along the Clinch River Basin.(3)A
- Along the Powell(2), Helston, Levisa and Russell fork. A
- Those areas that have the greatest potential to affect water quality.A
- In general, timber land lying immediately adjacent to major water courses on land containing important wildlife, ecological or historical resources should be given highest quality. A

Salem

- The headwaters of the South Fork Roanoke in Floyd, Roanoke, Montgomery and Franklin County. " Free State Forest" B
- Former public drinking watersheds scattered throughout Western VA that local governments are thinking of selling since many pump water from rivers and treat for consumption. Ex. Is Moore's Creek Reservoir, Big Survey and others. B
- The remaining large tracts of land in SW VA that can be proactively protected before development or price get too high. B
- The mountain tops in Roanoke and Botetourt Counties.B
- Roanoke River Riparian buffer.B
- Moore's Creek and the Brushy Hills tract in Rockbridge County.B
- In holdings and adjacent land to USFS.B
- Botetourt County is developing rapidly and needs help.B
- Roanoke County needs to protect Read Mt. B
- Floyd County needs to protect Free State Forest.(2)B
- Read Mt.(2)B
- Cotaula Valley B
- Urban forestsB
- Riparian areasB
- Greenways B
- The entire state-you'll have enough difficulty figuring out criteria for individual tracts. It also depends on "bang for buck" priority. Focus versus "threatened, high-density" focus. B
- Mountains, and land adjacent to Craig/Montgomery Counties. B

Harrisonburg

- Watersheds for municipalities and the Shenandoah Valley forest and farmland. This would stop landslides and keep this area beautiful. C
- Frederick, Shenandoah, Page, Clarke and Warrant counties because of development pressures from Washington D.C. C
- Areas likely to be developed. C
- Base of the Blue Ridge. C
- Western and eastern slopes of Massanutten Mt. C
- The eastern and south eastern part. C
- Massanutten Mt. And Shenandoah River Basin. C
- Fulks Run is surrounded by the G.W. National Forest. It should be preserved and nurtured. Local folks have ancestral roots that go back in the area 250 years. Folks would probably be very interested in this program for the future. C

- Avtex is an industrialized area near Front Royal that is a royal conservation eyesore and hazard. Stemming re-development of industrial sites is a conservation project that could use Forest Legacy funding to protect/provide "Green" Areas. Corridor H is another example of where Forest Legacy could potentially impact development or roads and highways. C
- Areas on Virginia's Natural Heritage Maps.C
- Public drinking water sources. C
- Rockbridge County(Brushy Hills/Moore Creek Properties), Shenandoah County, Frederick County(Lake Frederick) C
- Wildlife corridors across Shenandoah Valley to connect Blue Ridge and Allegheny Mnts.(2) C
- The area around Buchanan and Tom's Brook-also corridor connecting Massanutten Mt. C
- Lands adjacent to the GWWF should be included. C
- Any urban forest tracts where recreation can be a major benefit. C
- Wildlife Corridors between Shenandoah National Park and GW National Forest. A buffer around Shenandoah National Park. (4) C
- Riparian areas and remote habitats(3) C
- Target remaining valley forests and riparian areas for wildlife corridors from/ to Blue Ridge and Allegheny. C

Farmville

- Family owned parcels could be kept in forests and not sold for development. D
- Priority should be placed on old forests(100 years +) and on those located in critical watersheds such as watersheds with drinking water supplies and those with high recreational value.D
- Land around Leesville and Smith Mountain Lake.D
- Region D should be designated urban forests around the major cities and towns.D
- Sandy River Reservoir.D
- Lynchburg, Farmville and South boston areas.D
- Riparian buffers should be protected(50' minimum) and forests on slopes should be protected from harvesting. D
- Protecting water quality and unique habitats for wildlife must be a priority. D

Warrenton

- Northern Virginia area-Fairfax and Loudoun County. E
- Area C is highly threatened and of significant value to water quality. E
- The eastern slope of the Blue Ridge in Loudoun County. Especially that area closest to Bluemont/Round Hill. The Catoctin mountains through the center of Loudoun-especially north and south of Leesburg. E
- Fauquier, Loudoun and Prince William Co.E
- Bull Run mnts. and adjacent areas. The Blue Ridge mountains.E
- Assessment process needed to do this. E
- Western Loudoun, Rappahannock and Clarke Counties have landowners very interested in being good stewards while being timber harvesters as well. E
- Haymarket, Arcola, Gainesville and Dulles.E
- Maintain continuous forest canopies connecting National Parks and state forests to other large forested areas, especially along rivers and ridge tops to allow migration of songbirds, bears and other forest dependent wildlife. E

Tappahanock

- Middle Peninsula, especially forest land adjacent to perennial streams. F
- F area is a tourist-retiree destination. The integrity of the land in this area needs to be preserved.F
- Northern Neck counties(3)F
- Blandfield in Essex.F
- Along any of the numerous rivers.F
- Adjacent or near current parks, refuges and historic sites. F

Chesapeake
- Fringe growth counties (cities); IOW, Suffolk, Prince George, Dinwiddie.G
- Probably not significant.G
- Chesapeake is discussing an Open Space Reserve Program that may be parallel to the efforts of the Forest Legacy Program.G
- Probably not much.G
- Jamie Rawl's property – South Hampton.G
- Eastern Shore – Tappahannock.G
- Skyline Drive – Bedford County.G
- Isle of Wight.G
- South Hampton County.G
- Anyplace left in Virginia Beach?? (Pungo area) G
- Dismal swamp.G
- Yes, Stumpy Lake – Sandbridge area – Southern part of Virginia Beach.G

Population and Residential Growth
- Growth and industry not suitable for the valley's health and welfare. Slow down development C
- Residential and commercial development(7)C
- Increased development(7)A
- Population growth E
- Increased population. F
- Population growth(4)C
- Population growth around town.(2)D
- Population growthB
- Increased development(9)E
- Increases in nearby development(2)C
- Development(10)B
- Development(3)F
- Pressure for residential development.(7)G

Taxes, Increased Land Valuation and Related Financial Issues
- Inheritance taxes. Also a lack of awareness that easement options exist. C
- Taxes/land valuation(3) C
- Increased land values. (7) E
- High taxes(4) E
- Estate taxes(2) E
- Settle estates.(4)D
- Increased taxes(3)A
- Tax pressures.(9)D
- Taxes. (3)G
- It is more lucrative to sell for development than to farm or harvest timber.(11)
- Retirement money. E
- Money(2)A
- Fear of losing farm/property to estate taxes and higher taxes in general.(5) B
- Inheritance constraining the conveyance of large, not very valuable, tracts without heavy tax liability. E
- Conversion for more valuable purpose and use.E
- Landowners seeking Money/profit.(4)B
- To make money(3)F
- Increased land value(4)F

- Increase in value from development.(6)D
- Increasing property values.(2)B
- Additional income.D
- Changes in income potential.(2)G
- Timber isn't as profitable for small family or company operations.E
- Economics A
- Low income generated from forestlands.D
- Declining income from agriculture.G
- Economic ñ forest fragmentation.G
- Farms in danger of bankruptcy.D
- Southwest Virginia is a relatively depressed area so many people turn to the resources they have to make ends meet. A

Changing Demographics and Land Use

- New intensive agriculture for crops and poultry houses. C
- Sale of land for highway and road development. C
- Demographics-large landowners are aging and conveying the property or its equity value to the next generation. E
- Family aging-i.e. estate settlement C
- Pasture for horses. (2)E
- Clear-cut logging(primary cause of forest logging).E
- Strip mining(2)A
- Agriculture conversion including grazing.(5)A
- Timber harvesting E
- Easy to subdivide and sell. E
- Ownership change. A
- Recreation A
- Too much commercial logging.A
- Age and declining income of farmers. B
- People moving out of rural areas for jobs.B
- Youth leaving farms.D
- Agriculture conversion.B
- Conversion to pasture land.D
- Golf courses.B
- Recreation uses. (i.e., Yosemite National Park overcrowded)G
- Industrial parks.B
- Industrial sites.D
- Industrial uses.G
- Clearcutting.B
- Selling of timber.G
- Fragmentation.B
- Changing ownership/economies.F
- Forest Fragmentation(changing land-use patterns adjacent or close by) C
- Continued farming or management of the land.G
- The loss of infrastructure and the conditions conducive to sustainable forest management due to surrounding land use change. E
- Exchange of land.D
- Changes in agriculture. G

Other Reasons

- Lack of education concerning the benefits(2)C
- Lack of concern for future generations and no clue as to the greater issue of land-use and sustainability. C
- Government, weather and incompatible neighbors(not understanding rural resource management) C
- There is no PDR program on the state level to assist landowners in keeping land in production. C
- Town annexation (we have 7 towns) C
- Paper industry depends on forests. C
- Poor quality/value of existing stands, due to lack of management and incentives for long-term management. A
- Water supply-lost wells.A
- Poor land use plans.F
- Poor land use policy.D

Praise for the Forest Legacy Program

- An excellent opportunity for Virginia to follow the lead of adjacent northeastern states in protecting forests from fragmentation. Glad the VDOF is addressing forest fragmentation
- Keep up the good work. Lets keep our forests and keep them healthy. C
- Get started.E
- I appreciate your efforts to initiate this program.A
- I like the program. I would weigh the benefit of this program against stream/river protection. I also see fewer people donating land or easements. If possible coordinate with other programs.B
- Good program E

Concern About Tree Plantations

- Tree plantations should not be eligible only natural forests regenerated naturally; natural forests. C
- Clear-cutting native hardwood or pine forest to replant with a white or loblolly pine monoculture(e.g. tree farming) is conversion of a forest to a non-forest use and should not be allowed within legacy areas. E
- I believe it is important that a forest does not include pine plantations or monoculture forests. A
- Pine plantations should not be included in the Forest Legacy Program.(2) D

Make Sure Citizens, Local and State Agencies Are Involved

- There should be local citizen involvement.(e.g., local advisory councils) in a program administration(e.g., site selection, monitoring)A
- There needs to be a mechanism built into the program that ensures follow up from VDOF and to educate heirs to property that are in the VFL Program. Citizen group oversight would be best. A
- Program needs to include needs of citizens and towns despite higher cost if threat of development is to be addressed. B
- Please publicize the availability of this program to stakeholders and the public.
- Need to work closely with local governments to ensure that comprehensive plan designations are not in conflict with the Forest Legacy. i.e. make sure that goals are compatible. B
- It would be most efficient and effective to allow private land trust, soil conservation districts and other local organizations to hold or co-hold the easements with the Forestry division. Local organizations could be required to qualify with the state. This locally driven structure would allow for better long-term stewardship and more efficient implementation of this program. E
- Communicate with county planning staff's and land trusts. Try to dovetail program with other conservation land acquisition programs, e.g. VA Land Conservation Fund and the Virginia Department of Game and Inland Fisheries Game Fund. B

Clarification Needed

- Does DOF have maps of forested acreage decline over recent years? What areas have lost the most?(probably N. VA).

- Define Perpetuity. Look for ì buy back authority. Explore reasons why people might not want to be involved in this program and resolve them. F
- The regions on the map are too arbitrary.B
- Main question is on the length of the Legacy Program.G

Other Suggestions and Comments

- Landowner should be allowed compensation if future condemnation by eminent domain occurs.G
- The map used should be redrawn to set the heavy populated areas away from the part of the forest land with less population.G
- The program must include excellent record keeping and coordination with other conservation easement programs. D
- Our focus group had lots of tax(IRS) related questions. Landowners should get clear written answers for these questions. D
- Program needs to be pared with other conservation easements.(2)D
- The preservationist's have gotten the Forest Service to stop cutting in the National Forest. When they find out tax money is being used for conservation easements, they will pressure the Forest Service to have timber harvesting stopped. E
- I believe that the entire state should be a Forest Legacy Area, rather than pockets of Forest Conservation Areas. This would serve as a preventative measure in areas where development has just begun in areas with high existing development, where much of the land has already been consumed. The program may not be as effective. The question is whether the plan is proactive or a Band-Aid?E
- I think the highest priority must be given to forest land which provides significant ecological benefits. Such as large intact native forests and wildlife travel corridors between these blocks. C.
- Keep it simple! C
- Will get back in touch with you soon on behalf of the Potomac Appalachian trails club. E
- You should give us one 10 minute break.E
- Small pot of money presents a limited potential, therefore focus on unique, significant and vitally important lands. Don't use program for regular tracts. Focus on significant forests (unusual forest types, species, specimens and plant communities.F
- There must be a term on buy back option for flexibility. F
- There should be a statewide law that will restrict tax increases. F
- Need to have some way of reassessing in 30-50 years and 75-99 years so its not in perpetuity. F
- Review the program by a panel. F
- It should be looked at as a long term land use planning tool, and not at what trees are growing today.D
- Restrict easements to those interested in working forests-not those interested in preservation/no harvest. C
- Keep expenses low-use local unpaid committees for evaluation and choice or properties. C
- We see a real need for purchase of development rights in the valley. C
- More money needed in this program. E
- Get started. If you go to a cost-beneficial analysis. Its great that you are preserving land but what about the areas that are more threatened and in need of protection. Areas such as northern Virginia due to intense population growth. E
- Define "Development" and "Forest" to maintain biodiversity. A
- The easement must contain language that mandates all forest management is done in consultation w/VDOF.A
- As a landowner, I am concerned about any "enforcement" penalties etc. that would not penalize future owners of the land. I would not sign into a program that would potentially penalize the new land owner and would also be concerned that the property value would decrease with any potential financial liabilities. A
- Lets produce high quality, high value hardwoods and give greater economic value to the forest as a forest. A
- I do not think the program should be used to purchase land outright, unless there was a very compelling reason. B
- Flexible framework that allows us to develop with other state, local and private programs that acquire easements or fee title lands. B

- Include whole state, not just areas you pick. Are corporations and families with large acreage eligible.B
- Department of Forestry: Beware of pressure to tailor program to satisfy political interests in NOVA at the expense of getting bang for buck in more rural, less threatened regions of the state.. ie. 1000 acres easement in NOVA= 10-20,000 acres in SWVA, but political kudos for DOF are greater with first option. B
- Good meeting. C

APPENDIX D

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